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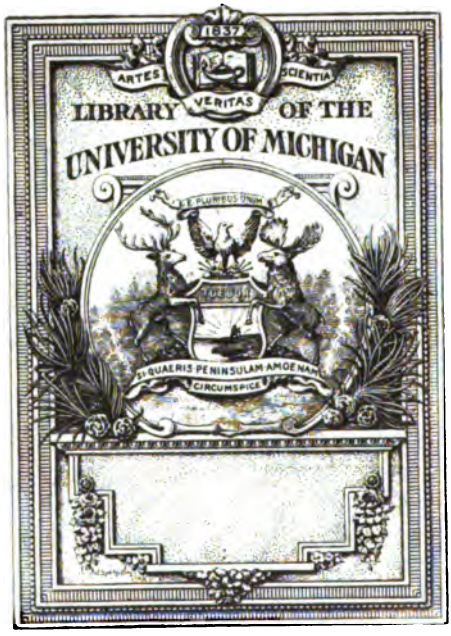
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AT

PRINCETON

1894-95

CATALOGUE

OF THE

COLLEGE OF NEW JERSEY

AT

PRINCETON

ONE HUNDRED AND FORTY-EIGHTH YEAR

1894-95

Princeton Press

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CALENDAR.

1894.

Sept. 18–19.	Examinations for admission, and the removal of entrance conditions in Princeton only.
Sept. 19.	First term begins.
Sept. 20–21.	Conditioned and unexamined students (not candidates for entrance) report to their instructors.
Sept. 26.	Preliminary examination for University degrees.
Nov. 8.	Stated Meeting of the Board of Trustees.
Nov. 29.	Thanksgiving Day.
Dec. 19, 12.30 P. M.	Christmas vacation begins.

1895.

Jan. 2.	Christmas vacation ends.
Jan. 25.	Day of Prayer for Colleges.
Jan. 25–Feb. 6.	Term Examinations.
Feb. 6.	End of first term.
Feb. 7.	Second term begins.
Feb. 14.	Stated Meeting of the Board of Trustees.
Feb. 22.	Washington's Birthday—Class of 1876 Prize Debate, 7.30 P. M.
April 12–16.	Spring Recess.
May 1.	Last day for renewing room agreements for '95-'96. Annual allotment of rooms.
May 15–25.	Senior final examinations.
May 29–June 7.	Examinations of the three lower classes.
June 9.	Baccalaureate Sunday.
June 10–12.	Commencement Meeting of the Board of Trustees.
June 10.	Class Day—Junior Orations, 7.30 P. M.
June 11.	Reading of Theses by scientific students—Annual Meetings of Literary Societies and Alumni Association—Lynde Prize Debate, 7.30 P. M.
June 12.	148th Annual Commencement.

June 13–14.	Examinations for admission, held simultaneously in Princeton and elsewhere.
June 14–Sept. 17.	Long vacation.
Sept. 17–18.	Examinations for admission, and the removal of entrance conditions in Princeton only.
Sept. 18.	First term begins—College assembles at 3 P. M. in Marquand Chapel.
Sept. 19–20.	Conditioned and unexamined students (not candidates for entrance) report to their instructors.
Sept. 25.	Preliminary examinations for University degrees.
Nov. 14.	Stated Meeting of the Board of Trustees.
Nov. 28.	Thanksgiving Day.
Dec. 18, 12.30 P. M.	Christmas vacation begins.

1896.

Jan. 2.	Christmas vacation ends.
Jan. 27–Feb. 5.	Term examinations.
Feb. 5.	End of first term.
Feb. 6.	Second term begins.
April 3–7.	Spring Recess.
May 18–23.	Senior final examinations.
May 27–June 5.	Examinations of the three lower classes.
June 10.	149th Annual Commencement.

1894.

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THE COLLEGE OF NEW JERSEY.

The College originated in the plan of Jonathan Dickinson, John Pierson, Ebenezer Pemberton, Aaron Burr, with others, to found an institution "in which ample provision should be made for the intellectual and religious culture of youth desirous to obtain a liberal education, and more especially for the thorough training of such as were candidates for the holy ministry." Its first charter was granted in 1746 by the Hon. John Hamilton, President of His Majesty's Council, and is noteworthy as the first college charter ever given in this country by a Governor or acting Governor with simply the consent of his Council.

A second and more ample charter was granted September 14th, 1748, by the "trusty and well-beloved" Jonathan Belcher, Esquire, Governor and Commander-in-chief of the province of New Jersey. After the war of the Revolution, the charter was confirmed and renewed by the Legislature of New Jersey. The Corporation is styled in that instrument "the Trustees of the College of New Jersey," and they are empowered to hold and administer the property of the College, make laws for the government of the institution, choose its President and Faculty and confer degrees. This Board is a self-perpetuating body, composed of twenty-seven members, with the Governor of the State as President *ex-officio*, or, in his absence, the President of the College. In response to the earnest desire of the petitioners for this charter, that "those of every religious denomination may have free and equal liberty and advantage of education in the said college, any different sentiments in religion notwithstanding," it was expressly provided that no

"person of any religious denomination whatsoever" should be excluded "from free and equal liberty and advantage of education or from any of the liberties, privileges or immunities of the said college on account of his or their being of a religious profession differing from the said trustees of the said college."

On April 27th, 1747, the Trustees made a public announcement that they had "appointed the Rev. Jonathan Dickinson President," and that the college would be opened in the fourth week of May next at Elizabethtown. President Dickinson having died on the 7th of October following, the Rev. Aaron Burr assumed the duties of the Presidency and the college was removed from Elizabethtown to Newark. Soon after, it was removed from Newark to Princeton, where in 1754–55 the first college building was erected. It was proposed to name this building "Belcher Hall" in recognition of Governor Belcher's devoted services. At his request that it should be called Nassau Hall, the Trustees ordered "that the said edifice be in all time to come called and known by the name of Nassau Hall."

The College of New Jersey, as now constituted, includes the John C. Green School of Science. This institution, which has its own professors and instructors, was founded in 1873 upon an endowment of Mr. John C. Green. The instruction given falls in three departments, General Science, Civil Engineering and Electrical Engineering. Its design is to furnish more extended and special instruction in the natural sciences, providing several scientific courses leading to the degree of Bachelor of Science and also various graduate courses. The Department of Civil Engineering was added in 1875, by further endowment from the residuary legatees of Mr. Green. The Department of Electrical Engineering was added in 1889, by the same donors.

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Assistant in Biblical Instruction.
109 Hodge Hall.

WILLIAM KELLY PRENTICE, A.M.,
Instructor in Greek.
7 Edwards Place.

WILLIAMSON UPDIKE VREELAND, A.B.,
Instructor in Romance Languages.
67 Prospect Av.

REV. WEBSTER BROWNING, A.M.,
Instructor in Latin.
2 Stockton St.

WILLIAM ASHENHURST DUNN, A.M.
Assistant in English.
175 Nassau St.

HERBERT FOWLER SILL,
Assistant in Applied Chemistry.
13 Vandeventer Av.

OTHER COLLEGE OFFICERS.

EDWIN CURTIS OSBORN,
Treasurer.
College Offices.

HENRY NEVIUS VAN DYKE, A.M.,
Registrar.
College Offices.

HENRY GREEN DUFFIELD, A.B.,
Assistant Treasurer.
23 University Place.

JOHN BELL HATCHER, PH.B.,
Curator of Vertebrate Palæontology.
76 Canal St.

GEORGE STEVENSON PATTON, A.M.,
President's Secretary.
Prospect.

GEORGE GOLDIE,
Director of Gymnasium.
35 University Place.

LEWIS FREDERICK PEASE,
Organist.
2 North Albert B. Dod Hall.

JOHN WILLIAM TOPLEY,
Proctor.
9 Park Street.

STANDING COMMITTEES OF THE FACULTY.

Library—Chairman—THE PRESIDENT.
Secretary—THE DEAN.

Schedule of Studies—Chairman—THE PRESIDENT.
Secretary—PROFESSOR WEST.

Weekly Schedules and Examinations—
Chairman—PROFESSOR THOMPSON.

Local Entrance Examinations—Chairman—THE PRESIDENT.
Secretary—PROFESSOR FINE.

University Degrees and Fellowships—Chairman—THE PRESIDENT.
Secretary—PROFESSOR WEST.

Absences—Chairman—THE DEAN.

Special and Delinquent Students—Chairman—PROFESSOR WILSON.
Secretary—PROFESSOR DANIELS.

Discipline—Chairman—THE DEAN.
Secretary—PROFESSOR WILSON.

Sanitary—Chairman—THE DEAN.
Secretary—PROFESSOR SLOANE.

Music—Chairman—PROFESSOR MARQUAND.

Out-Door Sports—Chairman—PROFESSOR SLOANE.
Secretary—PROFESSOR FINE.

Scholarships and Charitable Funds—
Chairman—PROFESSOR DUFFIELD.

Teachers and Schools—Chairman—PROFESSOR PACKARD.
Secretary—PROFESSOR WINANS.

Catalogue—Chairman—PROFESSOR MAGIE.
Secretary—PROFESSOR THOMPSON.

OFFICE HOURS.

THE DEAN will be in the Faculty Room daily from 2 to 3.

THE REGISTRAR, College Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday.

THE TREASURER, College Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday; June 15 to September 1, 9 to 12 daily.

THE FACULTY meets at four o'clock on Wednesday afternoon. Communications from students should be in writing and should reach the Registrar before Wednesday noon.

THE COMMITTEE ON ABSENCES meets at noon on Wednesday. Requests and excuses should be presented by the student in person.

CLASS OFFICERS.

ACADEMIC.

Seniors, ... PROFESSOR WILSON, 48 Steadman Street.
Juniors, ... PROFESSOR DUFFIELD, 23 University Place.
Sophomores, . . . PROFESSOR PACKARD, College Place.
Freshmen, ... PROFESSOR WESTCOTT, 12 West Witherspoon.
Special Students, . PROFESSOR FINE, 41 Prospect Av.

SCIENTIFIC.

Seniors, Juniors and Sophomores, B.S., and Special Students,
PROFESSOR CORNWALL, 51 Nassau Street.
Seniors, Juniors and Sophomores, C.E.,
PROFESSOR MCMILLAN, 40 Bayard Av.
Freshmen and first year Specials,
PROFESSOR ROCKWOOD, 34 Bayard Av.

FELLOWS.

Residence.

JOSEPH WILLIAM LESTER JONES, A.B., 19 Canal St.
Chancellor Green Fellow in Mental Science.

CHARLES ALEXANDER ROBINSON, A.B., 6 South Middle Reunion.
Fellow in Classical Literature.

FRANK FORRESTER THOMPSON, A.B., 27 South Edwards Hall.
Class of 1860 Fellow in Experimental Science.

EDWARD RUTLEDGE ROBBINS, A.B., 11 South Edwards Hall.
J. S. K. Fellow in Mathematics.

GEORGE MADISON PRIEST, A.B., Berlin.
Boudinot Fellow in Modern Languages.

CHARLES MERRITT CARTWRIGHT, A.B.,* Waynesville, O.
Boudinot Fellow in History.

ULRIC DAHLGREN, A.B., 43 University Hall.
E. M. Biological Fellow.

FREDERICK CLARK PAULMIER, B.S., 5 East Witherspoon Hall.
Class of 1877 University Fellow in Biology.

* Resigned.

ACADEMIC DEPARTMENT.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty Room in the College Offices the evening before the examination begins or on their arrival the following morning. Examinations for admission will be written, with supplementary oral examinations if needed. The first examination will begin in Princeton, on Thursday, June 13th, 1895, at 10 A. M. The second will begin on Tuesday, September 17th, 1895, at 10 A. M. Applicants who have any conditions or other deficiencies from the June examination are required to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations will also be held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha, Denver; and at preparatory schools and other cities when necessary. The places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission to any class, or as special students, must bring with them testimonials of good moral character and attainments, preferably from their last instructors, and if the candi-

date has been a member of another college or university, he must produce a certificate from its President or Faculty that he is free from censure in that institution.

No candidate is admitted into the College without examination and a vote of the Faculty.

Immediately after the opening of the College the entering students meet according to announcement for the registration of their names and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other college so long as we are members of the College of New Jersey; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

Candidates for admission to the Freshman class will be examined in the books and subjects detailed below. It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

In the subjoined list of subjects, the following constitute the minimum requirements which are expected of all candidates: **1, 2, 3, 4, 5, 6; 12, 13, 14, 16** (or **15** or **17**); **20** (or **21**); **24, 25, 26, 27.**

Candidates who pass satisfactorily in certain of the other subjects, in addition to those enumerated above, may in this way secure advanced standing at the start in one or all of the subjects of instruction of the Freshman year. The requirements for advanced standing in each department are as follows:

In Latin: Two or more of **7, 8, 9, 10, 11** (one to be **7, 8** or **9**).

In Greek: Two or more of **15, 16, 17, 18, 19** (one to be **15, 16** or **17,** excepting the one offered under the minimum requirements).

In French: **22.** To be offered only by candidates offering **20.**

In German: **23.** To be offered only by candidates offering **21.**

In Mathematics: One and but one of **28, 29.**

1. *English.* The examination will consist of an exercise in English prose composition based upon specified books and authors. Questions as to the subject matter, structure, and style of these books will be asked. Candidates must be prepared in all of the books required for the year of entrance. For 1895, the books will be: Irving's Sketch Book and *Warner:* Life of Irving (Harper & Bros.). For 1896, the books will be: Milton's L'Allegro and Il Penseroso, Macaulay's Essay on Milton, Longfellow's Evangeline, and Webster's First Bunker Hill Oration.

2. *Latin Grammar.* The inflections; the simpler rules for composition and derivation of words; syntax of cases and verbs; the structure of the sentence in general, with particular regard to relative and conditional sentences, indirect discourse and the subjunctive; so much prosody as relates to accent, versification in general and dactylic hexameter.

3. *Latin Composition.* Translation into Latin of easy continuous prose based upon Cæsar and Cicero.

Special attention is called to this requirement. It is strongly recommended that prose composition begin with the earliest study of Latin and be used continuously as the means for organizing the pupil's vocabulary under the forms of grammar. The writing of detached sentences should give place as soon as possible to practice in writing continuous prose, based chiefly or exclusively on definite portions of Cæsar and Cicero, during the whole time when these authors are being read. Such exercises may be found in Collar's Practical Latin Composition and Daniell's Exercises in Latin Composition.

4. *Cæsar.* The first five books of the Gallic War.

5. *Virgil.* The first six books of the Æneid, including the prosody of hexameter verse.

6. *Cicero.* Nine orations, including the four against Catiline, the orations for Archias and the Manilian Law, and any other three, preferably to be selected from the orations for Milo, for Marcellus, for Ligarius, and the fourteenth Philippic.

7. *Ovid.* Selections from the Metamorphoses (2500 lines).

8. *Sallust.* The Catiline or the Jugurtha.

[**7** or **8** may be offered in place of any three orations of Cicero.]

9. *Virgil.* The Eclogues and Georgics, or the last six books of the Æneid.

10. *Latin Sight Translation.* Sight translation into English from easy Latin prose writers, such as Cornelius Nepos, Aulus Gellius, Quintus Curtius and Eutropius.

11. *Roman History and Geography.* The history of Rome down to the battle of Actium. The ancient geography of Italy and Gaul and the topography of the city of Rome.

12. *Greek Grammar.* The topics for examinations in Greek grammar are similar to those enumerated under Latin grammar. Special stress is laid upon a thorough knowledge of the noun and verb inflections.

13. *Greek Composition.* Simple sentences and easy continuous discourse based upon Xenophon's Anabasis, chiefly to test the candidate's knowledge of accent, inflection and the fundamental rules for the syntax of the noun and verb.

14. *Xenophon.* The first four books of the Anabasis.

15. *Xenophon.* The fifth, sixth and seventh (chapters i–iii) books of the Anabasis.

16. *Herodotus.* The seventh book of the History (sections 1–60 and 172–239).

17. *Homer.* The first three books of the Iliad.

18. *Greek History and Geography.* The history of Greece down to the end of the Peloponnesian War. The ancient geography of Greece and Asia Minor.

19. *Greek Sight Translation.* Sight translation into English from easy Greek prose, such as the writings of Xenophon.

20. *Elementary French.* Translation at sight of easy French prose into English and of easy English exercises into French. Rudiments of grammar, including the irregular verbs. (So much as is in Whitney's Brief French Grammar, or Whitney's Practical French Grammar, Part I, or Edgren's, Part I.) Super's Reader, or Whitney's, is recommended, or an equivalent amount of reading.

21. *Elementary German.* Translation at sight of easy German prose into English and of easy English exercises into German. Rudiments of grammar, comprising declension of nouns; conjugation of auxiliary, regular, and irregular verbs; separable and inseparable verbs; declension and comparison of adjectives; pronouns; the most frequent prepositions; numerals; the principles of the normal, inverted and transposed order. Fifty pages of easy prose: Grimm's Märchen or Meissner's Aus meiner Welt.

Either **20** or **21**, but not both, are to be offered.

22. *Advanced French.* Dumas: La Tulipe Noire, and Daudet: Lettres de mon Moulin. Translation into French of English exercises based on these books.

23. *Advanced German.* Three cantos of Goethe's Hermann und Dorothea. Harris's German Composition: Introductory Selections and Easy Narrative Selections. (Parts I, II.)

24. *Arithmetic.* Including only greatest common divisor and least common multiple; vulgar and decimal fractions; percentage apart from its commercial applications; square root; the metric system of weights and measures. Special emphasis is laid upon accuracy and facility in reckoning.

25. *Plane Geometry.*

26. *Algebra.* Through quadratic equations involving two unknown quantities,—including radicals and fractional and negative exponents.

27. *Algebra.* Indeterminate equations of the first degree, ratio and proportion, variation, arithmetical and geometrical progression, undetermined coefficients and the binomial theorem.

28. *Solid and Spherical Geometry.*

29. *Logarithms and Plane Trigonometry.*

Preliminary Examinations.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate, unless he passes in at least four subjects, nor will the preliminary certificate be granted to any candidate more than once. English, Latin Grammar, Latin Composition, Greek Grammar and Greek Composition, Algebra **27** may not be tried at the preliminary examination. Elementary French or German may not be tried at the preliminary examination unless the candidate expects to offer **22** or **23** the next year.

Admission to Special Courses.

In exceptional cases, students, not members of any one of the four regular classes nor candidates for a degree, are admitted to the privileges of the College, and allowed to take special undergraduate

courses, selected under the direction of the Faculty, in such a manner as to secure full and profitable employment of their time. Such special students undergo an entrance examination sufficient to ascertain their preparation for the courses proposed, and are subject to the same regulations and discipline and to the same examinations in the studies pursued, as other undergraduates. On completing their course they receive certificates of proficiency. These special courses, however, are not offered to those who have failed in the regular course.

Sophomore, Junior and Senior Entrance Requirements.

Candidates for admission to the Sophomore class who have not completed the studies of the Freshman year at another approved College must first pass an examination on the studies required for admission to the Freshman class.

Candidates for admission to the Sophomore, Junior or Senior class, when coming from another College, are examined only in the studies of the year preceding that which they wish to enter, provided they present evidence that they have passed satisfactory examinations on the previous studies of the curriculum and entrance requirements, or their equivalents.

A candidate coming from an undergraduate class in an approved College may be allowed, at the discretion of the Faculty, to enter the next lower class in this College, without examination, provided he presents satisfactory certificates from his former College.

The studies of the Freshman year are Latin, Greek, Mathematics, English, French or German. For admission to the Sophomore class, candidates will be examined on the following minimum amounts or equivalents.

In Greek: Xenophon's Hellenica, Books I–II; Herodotus, 100 pages, exclusive of any part offered for entrance to the Freshman class; Xenophon's Symposium.

In Latin: Horace, Odes, two books; Livy, books I and XXI or XXII; Cicero, *De Senectute*,; Roman History to the time of Augustus; Prose Composition based on Livy, book I.

In Mathematics: Algebra completed and Elementary Theory of Equations; Solid Geometry; Plane Trigonometry.

In English: Hunt's Discourse, pp. 19–150, or equivalent.

In French or German: The elements of one of these languages.

The studies of Sophomore year include the following required subjects: Latin, Greek, Mathematics, Mechanics, English, History, Chemistry, Zoology and Botany; and the following elective studies, of which two must be taken: Latin, Greek, Mathematics, French, German. While it is desirable that the candidate for the Junior year shall have some knowledge of Botany and Zoology, yet examination in these studies is not required.

The required studies of Junior year are Psychology, Physics, Logic, and Political Economy. Five elective studies are to be chosen from the departments of Philosophy, Language and Literature, Mathematics and Natural Science.

At the discretion of the Faculty, the Bachelor of Arts diploma of an approved College may be taken in place of the examination for entrance to the Senior year.

No person is admitted to the College as a candidate for the degree of Bachelor of Arts after the beginning of the first term of the Senior year.

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

Regular Examinations.—At the end of each term each class is ordinarily examined in the studies of that term. At the close of the second term the examination in certain subjects may embrace not only the work of that term, but the course of the entire year.

Partial Examinations and Written Recitations.—In addition to the regular examinations, partial examinations or written recitations are held from time to time during the term.

Divisional Examinations.—In the Freshman class, special examinations are held early in the first term, the results of which determine the distribution of the class into graded divisions. These are reorganized at the beginning of the second term according to the results of the last preceding regular examinations.

General Regulations.—Examinations are for the most part conducted in writing, but in certain subjects are oral in whole or in part. Private examinations are not allowed except in extreme cases and by special permission of the Faculty. Absence from an examination, except for reasons of absolute necessity, will be regarded as a serious delinquency.

Regulations Concerning the Removal of Conditions and of Deficiencies Due to Absence.

A student is conditioned in a course.

a. If he fail to pass the examination in that course or to satisfy the requirements of the term's work;

b. If he be excluded from examination by the instructor in the course, in accordance with the following rule: A student who is absent from more than one-sixth of the exercises of any course and whose work is otherwise unsatisfactory, may be excluded by the instructor from the examination in that course;

c. If he be absent from the examination without a satisfactory excuse. A student who is absent from the examination of a course will be reported by the Registrar as conditioned in that course, unless he appear in person at the first regular meeting of the Committee on Absences held after his return to his duties, and present a satisfactory excuse for his absence.

The following regulations concerning conditions apply to all cases of regular students except those which occur at the end of the Senior year. For these there are special regulations given on page 33.

Any special student who is conditioned must remove his conditions under the same regulations as those which apply to the regular students, and the question of his status in College shall be considered by the Committee on Special Students.

1. Any regular student who receives three conditions at the end of a term in courses involving as much as six hours weekly schedule time shall be dropped from his class and unless expressly permitted by the Faculty to enter the next lower class, shall be required to withdraw at once from the College. In case a student thus withdrawn is subsequently permitted by the Faculty to return to College, he may not rejoin his former class.

2. Any regular student who is conditioned, but who does not come under the operation of the rule contained in Section 1, may be allowed an examination to remove his conditions. If the conditions be received at the end of the college year, he shall report in person to the instructor in each course in which he is conditioned within two days after the beginning of the next college year; if they be received at any other time, he shall report within two days after he receives notification of his conditions; and he shall make arrangements for his examination at some time within the limits hereinafter specified. Failure to report thus or to attend such an examination at the time appointed, unless this failure be excused by the Committee on Absences, shall debar the delinquent from the examination, and he shall be classed as having failed in the examination.

Any regular student whose absence from a regular examination is excused by the Committee on Absences is allowed an opportunity to make up his deficiencies under the same regulations.

The examinations held under these regulations must be held, if to remove conditions or deficiencies in first term courses, within

four weeks after the beginning of the second term; if to remove conditions or deficiencies in second term courses, within one week after the beginning of the next college year.

3. Any regular student who fails to remove his conditions or deficiencies at the first trial may be granted a second examination, which shall be final. To obtain the privilege of this further trial he must report to the instructors in the course in which he is conditioned or deficient within two days after receiving notice of his failure in his first trial, and must make arrangements for his examination at a time within four weeks after that trial. He shall employ a tutor in each course in which he is conditioned or deficient, and shall satisfy the instructor that he has done a reasonable amount of work with his tutor. If on examination he still fail to pass, he shall be required to enter a lower class or to withdraw from College. If he fail to report or to attend the examination at the time appointed or to employ a tutor as directed he shall be considered as having failed to pass the examination.

4. In the application of these regulations special cases arising from illness or other causes will be duly considered by the Faculty. Any request to be relieved from the operation of any of these regulations must be made to the Faculty in writing.

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student. The maximum mark in each study is one hundred; the minimum or passing mark is fifty.

Each instructor, after computing from recitations and examinations the marks of his classes, determines each student's rank by assigning him to one of certain groups into which the class is divided. These groups are constituted and numbered in order of merit—those students whose marks indicate the highest attainments being assigned to the first group, the next highest to the second group, and so on through the groups.

The general rank of a student is determined by combining his group numbers in the general courses in proportion to the allotted schedule time of each. Those students whose averages are highest, and above an established limit, are assigned to the first general

group, those next highest to the second general group; and so on through the general groups.

In determining a student's standing, essays count as one hour per week throughout each of the four years. Account is taken of attendance and conduct as well as scholarship, according to the published rules of the Faculty.

A report of the standing of each student is made to his parent or guardian by the Registrar of the College at the close of the first term and at the close of the year. The latter report gives also the standing for the whole year.

GRADUATION.

Bachelor's Degree.

Students who pass their final examinations are ordinarily recommended by the Faculty for the degree of Bachelor of Arts, and if the recommendation is approved by the Trustees, the degree is conferred at Commencement, and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

No student will be recommended to the Trustees for a degree who fails to pass the examinations at the close of the last term of the Senior year.

Any member of the Senior class failing to pass the regular final examinations in but *one* course may, by vote of the Faculty, be allowed a re-examination, and if successful in passing this, may be recommended to receive his degree with his class.

Any member of the Senior class failing to pass the regular final examinations in *two* courses may, by vote of the Faculty, be allowed a re-examination, and if successful in this, may be recommended for a degree *at some time in the next Academic year.*

Final Rank and Graduation Honors.

The final rank of members of the graduating class is computed by combining the averages for the several years of the course, except that the average for the Freshman year is omitted in those cases in which it would lower the standing of the student. The Faculty then determines what portion of the class shall be printed as the Honor List—the names of the members of each group being printed in alphabetical order. Special Honors in particular departments are also awarded.

The first and second general groups thus determined are the Honor groups of the graduating class, and are designated *magna cum laude* and *cum laude*, respectively.

The higher distinction of *insigni cum laude* and the highest, of *summa cum laude*, are reserved for very unusual excellence.

Commencement Speakers.

The student whose individual rank is highest, is ordinarily awarded the Latin Salutatory by vote of the Faculty. In like manner the student whose individual rank is the next highest receives the English Salutatory. The Valedictory is awarded with special regard to the qualifications of the student as a valedictorian, as well as on the ground of scholarship. Five others out of sixteen recommended by the Baird Prize Committee deliver English Orations, usually in the order of their scholarship.

In the award of all degrees and honors, regard is had to the conduct of the student during his course, and any student who has incurred serious discipline may be debarred from the rank to which otherwise his scholarship would have entitled him.

UNDERGRADUATE COURSE OF STUDY.

The course for the degree of Bachelor of Arts extends through four academic years and embraces instruction in the three departments of Philosophy, Language and Literature, Mathematics and Natural Science.

It includes two classes of studies, the required and the elective. The required studies are regarded as fundamental and essential in a liberal education and therefore are not left to the student's option. The elective studies, though important, are not all indispensable and accordingly are left, within definite limits, to the student's choice. Attendance upon all elective courses, when once chosen, as well as upon all required courses, is obligatory. In connection with some departments there are also optional courses, with voluntary attendance.

Most of the studies of the Freshman year are required, and include Latin, Greek, Mathematics, and English. The student elects between French and German.

In the Sophomore year the studies are substantially all required. They include Latin, Greek, Mathematics, and English, continued from the Freshman year, and, in addition, General History, Mechanics, Chemistry, Zoology, and Botany. Opportunity is also given in elective courses in Latin, Greek, Mathematics, French, and German, for the student to extend his required work in any two of these directions.

In the Junior year the elective system more properly begins. About one-third of the student's time is occupied with required studies, which are Psychology and Logic, Political Economy, Physics. In addition to these the student chooses five elective courses, some of them open only to Juniors and others to Juniors and Seniors.

In the Senior year the range of electives is wider, the required studies being Ethics and Evidences of Christianity. Besides these the student selects seven elective courses of study.

The various elective courses for Sophomores, Juniors and Seniors are detailed on the following pages.

To prevent confusion and secure intelligence of choice on the part of students, the electives are arranged systematically. As a rule no elective course is introduced until the student has passed through a required course in the same general department of study. The Sophomore electives are extensions of subjects already familiar to the student in the required courses, and the Junior and Senior electives, though largely new studies, are preceded by suitable required courses.

A further inducement to coherency in choice is found in the provision for Honors. Apart from the General Honors awarded for general excellence, there are Special Honors in the leading departments, in both required and elective studies. The effect of this is to concentrate choice upon cognate studies. The General and Special Honors are described after the Exhibit of Studies.

In the two lower years the instruction is conducted mainly by recitations. The Freshmen and Sophomores recite in four, five, six, or seven divisions, constituted according to rank and according to their degree of proficiency in the leading studies. They are divided separately for the classics, mathematics, and modern languages. As the work is thus proportioned to individual ability, rapid progress can be made by those who have special aptitude for certain studies.

Optional courses, so ordered as not to conflict with the time allotted to the regular instruction of the course, are offered in connection with several departments, under such restrictions as may be prescribed by the Faculty. These courses are designed to benefit those who wish to extend their reading or study in certain branches; they amplify the subjects taken up in the regular course, and in some cases conclude with a special examination upon which is based a certificate of proficiency. A student may take not more than two optional courses at one time; and only one course, if that course occupies more than two hours weekly.

In awarding the Bachelor's degree, and assigning the final rank, the student's work for the whole four years is taken into account.

Regulations Regarding the Choosing of Electives.

Students are required to choose their elective studies for the first term at the beginning of that term, and no changes will be

allowed after the close of the third week, and none before that time, except for special reasons approved by the Faculty.

Students are required to hand in writing to the Registrar, on or before the third Monday in January, their choice of electives for the second term, and no changes will be allowed after that date, except for special reasons approved by the Faculty.

If a student be in the lowest group in any department he shall have liberty to choose his elective studies only in departments in which his previous standing has been above that group. If he desire any other elective studies he shall send in his proposed list of such studies to the Faculty for approval, and if his choice be not approved, the Faculty shall assign him his electives.

STATEMENT OF COURSES.

DEPARTMENT OF PHILOSOPHY.

Mrs. Robert L. Stuart, of New York, gave the College one hundred and fifty-four thousand dollars, to maintain professorships in the Department of Philosophy, embracing Ethics, Logic, Metaphysics, History of Philosophy and Psychology. She gave this in memory of her husband, the late Mr. Robert L. Stuart, and of his brother, the late Mr. Alexander Stuart.

The Professorships now established on this foundation are those of Psychology and History of Philosophy, Ethics, and Mental Science and Logic.

(In the following statements of courses, the numbers in brackets indicate the number of exercises a week.)

I. Moral and Religious Philosophy.

THE PRESIDENT AND PROFESSOR SHIELDS.

1. Ethics. Theoretical and practical ethics, the foundation of moral obligation, the will, conscience, the nature of virtue, and the moral law. Recent ethical discussions. Lectures. Senior Required;

first term [2]. The President. *Calderwood:* Handbook of Moral Philosophy.

2. Evidences of Christianity. An exhibition or outline of the exceptional evidence that accredits the Christian religion; to show that Christianity is and that anti-Christian systems are not capable of rational defence. Senior required; second term [1]. The President.

4. Harmony of Science and Religion. With a view to the scientific evidences of Christianity, and the purification and completion of philosophy. Senior Elective; second term [2]. Professor Shields. Lectures by the Professor, and extemporaneous essays by the student.

5, 6. (Latin 13, 14.) Lucretius, De Rerum Natura, and Cicero, De Natura Deorum. Senior Elective; both terms [2]. Professor Packard.

7, 8. Theism. Senior Elective; both terms [2]. The President.

9. Theoretical Ethics. Graduate course; first term [1]. The President.

10. Science and Religion. The history and the logic of the sciences with reference to emerging problems of religion. Graduate course; second term [2]. Professor Shields. Lectures.

II. Mental Philosophy.

PROFESSORS ORMOND, BALDWIN, AND HIBBEN, AND MR. WARREN.

1. Psychology. The elements of psychology, treating of the cognitive and motive powers. Junior required; first term [2]. Professor Ormond. Lectures. *McCosh:* Cognitive and Motive Powers.

2. Elements of Logic. The elements of formal logic. Junior Required; second term [3]. Professor Hibben. Lectures. *McCosh:* Manual.

3 I. History of Ancient Philosophy. Greek and Roman philosophy to close of Pagan Schools. Given 1895–96, alternating with 3 II. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures. *Zeller:* Outlines of Greek Philosophy; *Windelband:* History of Philosophy.

4 I. History of Medieval Philosophy, embracing the patristic and scholastic periods and ending with Francis Bacon. Given 1895–96, alternating with 4 II. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Ueberweg*, *Erdmann*, *Windelbund*.

3 II. History of Modern Philosophy. Philosophy from Descartes to Kant. Given 1894–95, alternating with 3 I. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures, with references to *Falkenburg*.

4 II. History of Modern Philosophy. Philosophy since Kant. Given 1894–95, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Falkenburg*.

The courses 3 I, 4 I, 3 II, 4 II furnish a continuous course of lectures on historical philosophy running through two years.

6. Experimental Psychology. Introduction to the subject. The method, scope, and most general results of the experimental treatment of the mind, considered especially in its connection with general psychology, education, and medicine. Special demonstrations, in the laboratory, of the psychology of movement, general sensibility, touch, pleasure and pain, temperature-sense, taste, and smell. Junior Elective; second term [2]. Professor Baldwin and Mr. Warren. *Ribot:* German Psychology of To-day. *Sanford:* Course in Experimental Psychology.

A fee of $2 is charged in the course to cover the cost of material used.

8. (Greek 10.) The Protagoras of Plato, and lectures on the Platonic philosophy. Junior and Senior Elective; second term [2]. Professor Orris.

9. Symbolic Logic and Theory of Probability. Senior Elective; first term [2]. Professor Hibben. Lectures.

10. Induction, and Theory of Logic. Senior Elective; second term [2]. Professors Ormond and Hibben.

11. (Greek 13.) Aristotle, the Nicomachean Ethics, with prolegomena and dictations. Senior Elective; first term [2]. Professor Orris.

13. Metaphysics and Theory of Knowledge. Lectures. Senior Elective; first term [2]. Professor Ormond. *McCosh:* First and Fundamental Truths.

14. Outlines of Philosophy. A course in encyclopedia of philosophy. Senior Elective; second term [2]. Professor Ormond. Lectures.

15. Physiological Psychology. Lectures and laboratory work on the anatomy and physiology of the nervous system in their bearing upon the problems of psychology. Senior Elective; first term [2]. Professor Scott. *Ladd:* Physiological Psychology.

17. Experimental Psychology. Detailed treatment by lectures and demonstrations of the measurement of mental intensities (Weber's law) and of the results of mental chronometry. Senior Elective; first term [2]. Professor Baldwin and Mr. Warren. References: Wundt, Ladd, Ribot, Jastrow.

18. Experimental Psychology. A continuation of course 6, although independent in its topics. The psychology of the special senses (sight, hearing, touch, etc.) experimentally treated. The second half of this course treats of the higher processes, memory, association, action, thought, as far as they can be approached experimentally, with the theory of their physical basis. Senior Elective; second term [2]. Professor Baldwin and Mr. Warren. Lectures, demonstrations, and practical work in the laboratory required of all students in this course.

A fee of $5 is charged in each of courses 17 and 18 to cover the cost of material used.

19, 20. General Psychology. Advanced course. First term: Senses and Intellect; second term: Feeling and Will, with consideration of abnormal mental conditions. Senior Elective, open to graduates; both terms [2]. Professor Baldwin. References: James, Sully, Ladd, Baldwin.

21, 22. Selected Topics in Philosophy. Graduate course; both terms [2]. Professor Ormond. Lectures.

23, 24. (Greek 15, 16.) Plato; analyses of his dialogues, lectures on his philosophy, reading of the Phædo and parts of the Republic. Graduate course; both terms [1]. Professor Orris.

25, 26. Experimental Psychology. Consisting largely in research work. Graduate course; both terms [2]. Professor Baldwin and Mr. Warren.

27, 28. Modern and Contemporary Philosophy. Graduate Seminary; both terms [2]. Readings, discussions and theses. This course is also open as an elective to those Seniors who are candidates for Special Honors in Philosophy. Professor Ormond.

29, 30. Graduate Psychological Seminary. Open as an optional to Seniors of the first and second groups who elect 19 or 20; both terms [1]. Professor Baldwin. Subject for 1894–95: Historical and critical theories of conception and judgment.

31. Theory of Mental Measurements. Graduate course; first term. Mr. Warren.

IV. History and Political Science.

PROFESSOR SLOANE AND MR. CONEY.

1 a. (Latin 3b.) Roman History. Freshman Required; first term [1]. Mr. Browning.

1 b. (A portion of Greek 1, 3.) Greek History. Freshman Required; first term. Mr. Robbins and Mr. Prentice.

3. General History. Sophomore Required; first term [2]. Mr. Coney. *Freeman:* General Sketch of History.

5. a. Ancient Oriental History. b. Institutions of Greece and Rome. Lectures and discussions. Junior Elective; first term [2]. Professor Sloane.

6. a. Medieval History. b. European History to the end of the seventeenth century. Lectures and discussions. Junior Elective; second term [2]. Professor Sloane.

7. Constitutional and Political History of England since 1688. Senior Elective; first term [2]. Professor Sloane.

8. American Political History. Senior Elective; second term [2]. Professor Sloane.

a. The Science of History. Six lectures. Junior and Senior Optional; second term [1]. Professor Sloane.

9 I. Comparative Politics. The origin and theory of the state. Given 1895–96, alternating with 7 II. Senior Elective; first term [2]. Professor Sloane.

9 II. The History of Political Theories. Given 1894–95, alternating with 7 I. Senior Elective; first term [2]. Professor Sloane.

10. Parliamentary and Congressional Government. Graduate course; second term [2]. Professor Sloane. *Bryce:* The American Commonwealth.

12. Historical Seminary. Open to Graduates and Senior Honormen; second term [2]. Professor Sloane.

V. Jurisprudence and Political Economy.

PROFESSORS WILSON AND DANIELS.

2. Political Economy. The Elements of Economics. Junior Required; second term [2]. Lectures. Professor Daniels. *Laughlin:* Elements of Economics; or *Giede:* Political Economy.

3 I. Outlines of Jurisprudence: an exposition of Jurisprudence as an organic whole, exhibiting the nature of its subject-matter, its relationship to cognate branches of study, the inter-relationship of its several parts to each other, and their proper function and aim. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 3 II. Given 1895–96. Professor Wilson. *Holland:* Elements of Jurisprudence.

4 I. International Public Law. Text-book, lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 4 II. Given 1895–96. Professor Wilson. *Hall:* A Treatise on International Law, 3rd edition, 1890.

3 II. General Public Law: its historical derivation, its practical operation and sanction, its typical outward forms, its evidence as to the nature of the state and as to the character and scope of political sovereignty. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 3 I. Given 1894–95. Professor Wilson. *Boutry:* Studies in Constitutional Law; *Wilson:* The State.

4 II. American Constitutional Law. Lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 4 I. Given 1894–95. Professor Wilson. *Cooley:* American Constitutional Law; and *A. V. Dicey:* The Law of the Constitution.

5. History of Law: in general, and as exhibited in the growth of typical national systems. Lectures and collateral reading. Restricted Senior Elective; first term [2]. Professor Wilson. *Maine:* Ancient Law.

Open only to Academic Seniors who take or have taken course 3 I. Those who wish to take this course are advised to consult with Professor Wilson before concluding their choice.

6. The Development of English Common Law: the genesis, growth, character, and general principles of English law. Lectures and collateral reading. Senior Elective; second term [2]. Professor Wilson.

Open only to Academic Seniors who have taken courses 3 1 and 5.

7, 8. (Latin 17, 18.) Roman Law. Readings, lectures, and recitations. Senior Elective, open to graduate students; both terms [2]. Professor Westcott. *Justinian:* Institutes. *Morey:* Outlines of Roman Law, or *Sohm:* Institutes of Roman Law.

9. Finance. An exposition of the principles of Public Finance, including monetary problems. Senior Elective; first term [2]. Lectures. Professor Daniels. *Bastable:* Public Finance.

10. History of Political Economy. Lectures and collateral reading. Senior Elective; second term [2]. Professor Daniels. *Ingram:* History of Political Economy.

11, 12. (Latin 21, 22.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

VI. Archæology and the History of Art.

PROFESSORS PRIME, MARQUAND, AND FROTHINGHAM.

PUBLIC LECTURES: Provision will be made for a short course of public lectures by the professors of the department.

1. Ancient Art, a general course on the art of ancient Egypt, Assyria, Phoenicia, Greece, and Rome. Junior and Senior Elective; first term [2]. Professor Marquand. *Reber:* History of Ancient Art.

2. Medieval Art, a general course on early Christian, Romanesque, and Gothic art. Junior and Senior Elective; second term [2]. Professor Frothingham. *Reber:* History of Medieval Art.

3. Greek Sculpture. Senior Elective and Graduate course; first term [2]. Professor Marquand. Lectures.

4. Renaissance Painting. Senior Elective and Graduate course; second term [2]. Professor Marquand. Lectures.

5. Romanesque Architecture and Sculpture. Senior Elective and Graduate course; first term [2]. Professor Frothingham. Lectures.

6. Gothic art. Senior Elective and Graduate course; second term [2]. Professor Frothingham. Lectures.

Courses in Greek architecture, Greek Industrial Arts, Greek Mythology in Art, also in Christian Architecture, Gothic Archi-

tecture, the subjects and symbols of Christian Art, Medieval Industrial Arts, and Renaissance Architecture and Sculpture have been given and may be expected in future years.

DEPARTMENT OF LANGUAGE AND LITERATURE.

VII. Greek.

PROFESSORS CAMERON, ORRIS, AND WINANS, MR. ROBBINS AND MR. PRENTICE.

1, 3. Xenophon: Hellenica I–II; Symposium. Greek Grammar and Composition. Greek History. Freshman Required; first term [4]. Mr. Robbins and Mr. Prentice. *Blake:* Hellenica. *Winans:* Symposium. *Oman:* History of Greece.

2, 4. Herodotus: Selections, Sight Reading. Xenophon: Memorabilia. Freshman Required; second term [4]. Professor Winans, Mr. Robbins, and Mr. Prentice. *Merry:* Herodotus, and *Teubner text.* *Winans:* Memorabilia.

5a, 6a. Demosthenes: The Olynthiacs and Philippics, the life of Demosthenes and the political condition of Greece in his time. Plato: The Apology and Crito. Greek prose composition on the basis of the text read during the year. Sophomore Required; part of class, both terms [2]. Professor Orris.

5b, 6b. Xenophon: Memorabilia and Symposium. Lysias; Orations. Sophomore Required: part of class, both terms [2]. Professor Winans or Mr. Robbins. *Winans:* Memorabilia, Symposium. *Bristol:* Lysias.

7. Euripides: Medea. Lectures on Greek drama and theatre. Sophomore Elective; first term [2]. Professor Cameron.

8. Lucian's Dialogues, with lectures. Sophomore Elective; second term [2]. Professor Winans. *Williams:* Selections from Lucian.

9 I. Thucydides: selections. The Sicilian Expedition, with a series of lectures on Thucydides and his work. Given 1893–94, alternating with 9 II. Junior and Senior Elective; first term [2]. Professor Winans.

9 II. Aristophanes: two comedies. Lectures on comedy and on Aristophanes and his works. Given 1894–95, alternating with 9 I.

Junior and Senior Elective; first term [2]. Professor Winans. *Merry:* Clouds (or Wasps). *Merry* or *Green:* Frogs.

10. (Ment. Phil. 8.) Plato: Protagoras, with lectures on the Platonic philosophy; or, Æschylus: Prometheus Vinctus or Agamemnon, with lectures on the Attic Drama. Junior and Senior Elective; second term [2]. Professor Orris.

11, 12. Sophocles: Œdipus Tyrannus. Greek Literature. Lectures. Senior Elective; both terms [2]. Professor Cameron.

13. (Ment. Phil. 11.) Aristotle: The Nicomachean Ethics, with prolegomena. Senior Elective; first term [2]. Professor Orris.

14. Homer's Odyssey (1895–96), or Greek lyric poets (1894–95), in alternate years. Lectures. Senior Elective; second term [2]. Professor Winans.

15, 16. (Ment. Phil. 23, 24.) Plato: his life and works, analysis of his dialogues, lectures on his philosophy, reading of the Phædo and the Republic. Graduate course; both terms [1]. Professor Orris.

School at Athens.

This College, in connection with others, assisted in establishing and contributes to the support of the American School of Classical Studies at Athens. This school affords facilities for archæological and classical investigation and study in Greece, and approved graduates of this College are entitled to all its advantages free of tuition. Professor Sloane represents Princeton in its Managing Committee.

VIII. Latin.

Professors Packard, West, and Westcott, Mr. Smith and Mr. Browning.

1. Livy: Books I and XXI. Freshman Required; first term [2]. Mr. Smith. *Westcott:* Livy.

2. Livy: Books XXI and XXII. Cicero: De Senectute. Freshman Required: second term [2]. Mr. Smith. *Westcott:* Livy. *Kelsey:* Cicero.

3a. Latin Prose Composition. Freshman Required; first term [1]. Professor Westcott. *Gray:* Exercises based upon Livy.

3b. Roman History. Freshman Required; first term [1]. Mr. Browning.

4. Terence: Andria or Adelphoe. Aulus Gellius: selections. Freshman Required; second term [2]. Professor Westcott. *West:* Terence.

a. Sight reading of various authors. Freshman Optional; both terms [1]. Professor Westcott.

5a. Cicero: De Officiis, with occasional lectures. Sophomore Required; part of class, first term [2]. Professor Packard. *Chase and Stuart.*

5b. Horace: Odes. Sophomore Required; part of class, first term [2]. Professor West. *Page:* Horace.

5c. Cicero's Letters, Epistolae Selectae. Sophomore Required; part of class, first term [2]. Mr. Browning. *Tyrrell:* Cicero in his Letters.

6a. Cicero: Tusculan Disputations. Sophomore Required; part of class, second term [2]. Professor Packard. *Chase and Stuart.*

6b. Horace: Odes. Catullus, selections. Sophomore Required; part of class, second term [2]. Professor West. *Page:* Horace. *Simpson:* Selections from Catullus.

7a. Tacitus: Agricola. Martial, selections. Sophomore Elective; first term [2]. Professor Westcott. *Church and Brodribb:* Tacitus.

7b. The period of the Civil Wars, 49 to 31 B. C., studied from original sources. Honor course, restricted (substitute for 7a). Sophomore Elective; first term [2]. Professor Westcott.

8a. Quintus Curtius: History of Alexander the Great. Sophomore Elective; second term [2]. Mr. Browning. *Crosby:* Quintus Curtius.

8b. The Reign of Tiberius with special attention to the Annals of Tacitus and the Historia of Velleius Paterculus, and including an elementary course in Epigraphy. Honor course, restricted (substitute for 8a). Sophomore Elective; second term [2]. Professor Westcott. *Allen:* Tacitus. *Rockwood:* Velleius Paterculus.

b. Latin Prose Composition. Sophomore optional, both terms [1]. Professor Westcott.

9. Juvenal's Satires, and selected Letters of Pliny; lectures upon the moral and religious aspect of the Earlier Empire. Junior and Senior Elective; first term [2]. Professor Packard. Any accepted edition or text.

10. Seneca's Epistolæ ad Lucilium. Lectures continued, with added work and thesis on selected portions of Seneca's other writings. Junior Elective; second term [2]. Professor Packard. *Teubner text.*

12. Plautus: Trinummus, Mostellaria, Amphitruo. Junior Elective; second term [2]. Professor West.

13. (Moral Phil. 5.) Lucretius: De Rerum Natura, together with Cicero: De Natura Deorum, Book I; lectures illustrative of the subject. Senior Elective; first term [2]. Professor Packard. *Harper's texts.*

14. (Moral Phil. 6.) Cicero: De Natura Deorum, Books II, III, with selected readings from De Divinatione, and De Fato; lectures. Senior Elective; second term [2]. Professor Packard. *Harper's texts.*

15. Roman Oratory: Cicero: Brutus, and Quintilian: Institutio Oratoria. Senior Elective; first term [2]. Professor West.

16. Early Latin Poetry. Lectures and recitations. Senior Elective; second term [2]. Professor West. *Merry:* Selected Fragments of Roman Poetry. *Sellar:* The Roman Poets of the Republic.

17. (Jur. and Pol. Ec. 7.) Roman Law: lectures and recitations. Senior Elective, open to graduates; first term [2]. Professor Westcott. *Sohm:* Institutes of Roman Law.

18. (Jur. and Pol. Ec. 8.) Roman Law. Senior Elective, open to graduates; second term [2]. Professor Westcott. The Institutes of Justinian.

19, 20. Selections from Tertullian, Lactantius and Augustine. Graduate course; both terms [1]. Professor Packard.

21, 22. (Jur. and Pol. Ec. 11, 12.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

A seminary has been established by the Trustees in connection with the Latin department.

IX. Sanskrit.

PROFESSOR WINANS.

1, 2. Beginners' course. Grammar; exercises; easy reading, such as Nala, or the Sâvitri episode from the Mahâbhârata; Hitopadeça, etc. Comparison of forms. Senior Elective and Graduate course; both terms [2]. Professor Winans. *Perry:* Primer, or

Geiger: Elementarbuch; *Lanman:* Reader; *Whitney:* Grammar.

8, 4. A second year's course in Sanskrit may be given with more extended reading, and with special attention to comparative grammar. Professor Winans.

X. Hebrew.

MR. MARTIN.

1, 2. Elementary Course. Grammar and exercises and reading easy portions of Old Testament. Senior Elective, open to Graduates; both terms [4]. Mr. Martin. *Green:* Elementary Hebrew Grammar.

XI. English.

THE DEAN AND PROFESSORS HUNT AND PERRY.

1, 2. (Oratory 1, 2) Elocution; combined with Rhetoric; Freshman Required; both terms [1]. Professor Perry.

4. Advanced Discourse and English Style. Lectures on the history and structure of the English Language. Sophomore Required; second term [2]. Professor Hunt. *Hunt:* Studies in Literature and Style; Principles of Discourse. *Champney:* History of English.

5. English Literature, historical and critical survey from Chaucer to Pope, lectures on representative authors. Junior Elective; first term [2]. Professor Hunt. *Hunt:* English Prose and Prose Writers. *Sweet:* Extracts from Chaucer. *Kitchin:* Spenser's Faerie Queene. *Macmillan:* Milton's Paradise Lost, Book I. *Hodgskins:* Milton's Lyrics.

6. English Literature. English dramatists before and after Shakespeare. Writers from Pope to Wordsworth. Junior Elective; second term [2]. The Dean.

7. Old English. Junior and Senior Elective; first term [2]. Professor Hunt. *Sweet:* Anglo-Saxon Reader. *Bright:* Anglo-Saxon Reader.

8. Old and Middle English. Junior and Senior Elective; second term [2]. Professor Hunt. *Morris and Skeat:* Specimens of Early English, Part II. *Skeat:* Chaucer (House of Fame). *Skeat:* Piers Plowman. *MacLean:* Old and Middle English Reader.

9. English Literature. English Literature from Cowper to Tennyson. Senior Elective; first term [2]. The Dean.

10. English Literature. Shakespeare. Lear, Romeo and Juliet, As You Like It, Coriolanus. Lectures on other plays. Senior Elective; second term [2]. The Dean.

12. American Literature. Discussion of leading types and authors. Senior Elective; second term [2]. Professor Hunt. *Richardson:* American Literature. *Stedman:* Poets of America.

13. Gothic. Senior Elective; first term [2]. Professor Hunt. *Skeat:* Gospel of St. Mark in Gothic. *Braune:* Gothic Grammar.

14. Old English and Gothic. Lectures, historical and philological. Senior Elective; second term [2]. Professor Hunt. *Harrison and Sharp:* Beowulf. *Hunt:* Cædmon (Exodus and Daniel). *Heyne:* Ulfilas.

15, 16. Advanced Old English and Gothic. Graduate course. Professor Hunt.

XII. Oratory and Æsthetic Criticism.

PROFESSOR PERRY AND MR. COVINGTON.

1, 2. Elocution; combined with Rhetoric. Drill in gesture and vocal emphasis. Exercises in description and narration. Freshman Required; both terms [1]. Professor Perry and Mr. Covington. *Raymond and Miller:* The Speaker. *Raymond and Wheeler:* The Writer.

4. Argumentative Composition. Sophomore Required; second term. [Exercises at specified hours.] Professor Perry and Mr. Covington.

6. Oratorical Composition and Delivery. Junior Optional; second term. [Exercises at specified hours.] Professor Perry.

7. Oratorical Composition and Delivery. Senior Optional; first term. [Exercises at specified hours.] Professor Perry.

There are public contests for various prizes in oratory, poetry and disputation. (See heading "Prizes and Competitive Scholarships.")

9. Poetics. Lyric, narrative and dramatic poetry will be studied as forms of expression, with especial reference to the metres of English lyric poetry, and to the technic of the drama. Senior Elective; first term [1]. Professor Perry.

10. Prose Fiction. An analysis will be made of character-delineation and plot as exhibited in representative novels, followed by a comparative study of the schools of modern fiction. Senior Elective; second term [2]. Professor Perry.

XIII. Exercises in English Composition.

In addition to short exercises in the forms of discourse, oratory and disputation, extended compositions, essays, disputations and orations are required in each of the four years of the course.

These are prepared under the supervision of the professors of English literature, discourse and oratory, and are carefully examined and corrected. The requirements are: Freshman year, two essays and an oration; Sophomore year, an essay, a written debate and a written oration; Junior year, an essay and an oration; Senior year, an essay and two orations. In every year of the course several prizes or honorary appointments are given for excellence in essay writing and in public address, either by the College, or by the Cliosophic or American Whig Societies, acting through committees appointed from their own members in the Faculty. (See heading "Prizes and Competitive Scholarships.")

XIV. German.

PROFESSOR HUMPHREYS AND MR. HOWARD.

1a. German. Elements of grammar, memorizing of short sentences for practice in pronunciation and drill in the chief points of grammar, reading of short stories. Freshman Elective (Required for those not taking German 1b or French 1); first term [2]. Mr. Howard. *Huss:* Conversation in German. *Joynes:* Reader.

2a. Grammar, continued, syntax, translation into German, memorizing of poetry, reading of easy literary prose. Freshman Elective (Required for those not taking German 2b or French 2); second term [2]. Mr. Howard. *Huss:* Conversation in German. *Joynes:* Reader.

1b. Grammar, syntax, composition, memorizing of poetry, reading of literary prose. Freshman Elective (Substitute for German 1a, open to those who have passed the advanced requirement for admission in German); first term [2]. Professor Humphreys. *von Jagemann:* Elements of German Syntax. *Harris:* German Composition. *Hauff:* Das Kalte Herz. *Andersen:* Bilderbuch ohne Bilder.

2b. Grammar, syntax, composition, memorizing, reading, continued. Freshman Elective (Substitute for German 2a, open to those who have taken German 1b); second term [2]. Professor

Humphreys. *Chamisso:* Peter Schlemihl. *Schiller:* Maria Stuart. *Von Jagemann:* Elements of German Syntax, and *Harris:* German Composition.

3. Grammar, composition, and practice at oral expression in German; memorizing; reading. Sophomore Elective; first term [2]. Professor Humphreys. *Storm:* Immensee. *Richl:* Burg Neideck. *Stein:* German Exercises.

4. Grammar, composition, practice in speaking, memorizing, continued; reading. Sophomore Elective; second term [2]. Professor Humphreys. *Schiller:* Wilhelm Tell. *Freytag:* Die Journalisten. *Stein:* German Exercises.

5. Reading in the classics, collateral reading of easy modern fiction, composition. Junior Elective; first term [2]. Mr. Howard. *Goethe:* Sesenheim. *Schiller:* Don Carlos. *Harris:* German Composition.

6. Reading and composition, continued. Junior Elective; second term [2]. Mr. Howard. *Lessing:* Critical works, Minna von Barnhelm. *Harris:* German Composition.

a. Conversation, syntax, and composition. Junior Optional; both terms [1]. Mr. Howard. *Von Jagemann:* German Syntax. Materials for German Prose Composition.

7. History of German Literature up to Luther. Lectures, theses and reading. Senior Elective; first term [2]. Professor Humphreys. *Lessing:* Laocoon. *Goethe:* Faust.

8. History of German Literature since Luther. Lectures, theses and reading. Senior Elective; second term [2]. Professor Humphreys. *Goethe:* Faust.

9, 10. Middle High German. Grammar, lectures and reading. Restricted Senior Elective and Graduate course, open only to those proficient in modern German grammar; both terms [2]. Mr. Howard. *Paul:* Mittelhochdeutsche Grammatik. *Bartsch:* Das Nibelungenlied, Walther von der Vogelweide.

11. Old High German. Grammar, reading, studies in word-forms. Requires a knowledge of modern German; knowledge of Gothic useful. Restricted Senior Elective and Graduate course; first term [2]. Mr. Howard. *Braune:* Althochdeutsche Grammatik, and Althochdeutsches Lesebuch.

12. Old Norse. Grammar and reading. Knowledge of modern German and of Gothic useful, but not indispensable. Senior

Elective and Graduate Course; second term [2]. Mr. Howard *Sweet:* Icelandic Primer. *Mogk:* Gunnlangssaga Ormstungen.

For courses in Gothic and Anglo-Saxon see announcement of the English Department.

XV. French.

PROFESSOR HARPER, DR. LEWIS, AND MR. VREELAND.

1a, 2a. Elementary French. Freshman Elective (Required for those not taking French 1b, 2b or German 1, 2); both terms [2]. Professor Harper, Dr. Lewis or Mr. Vreeland.

1b, 2b. French. Freshman Elective (substitute for French 1a, 2a, open to those who have passed the advanced entrance requirement in French); both terms [2]. Professor Harper, Dr. Lewis or Mr. Vreeland.

3. Advanced French. Sophomore Elective; first term [2]. Professor Harper, Dr. Lewis or Mr. Vreeland. *Balzac:* Harper and Livingood's Selections. *Dumas:* Les Trois Mousquetaires; outside reading and composition.

4. Advanced French. Sophomore Elective; second term [2]. Professor Harper, Dr. Lewis or Mr. Vreeland. *La Fontaine:* Fables. *Daudet:* Lettres de Mon Moulin.

5 I. French Literature. Lectures on medieval and renaissance periods and 17th century drama. Course for 1895–96, alternating with 5 II. Junior and Senior Elective; first term [2]. Professor Harper. *Voltaire:* Siècle de Louis XIV. *Corneille:* Cid.

6 I. French Literature. Lectures on principal authors of 17th century. Course for 1895-96, alternating with 6 II. Junior and Senior Elective; second term [2]. Professor Harper. *Molière:* Le Misanthrope. *Duc de St. Simon:* Mémoires.

5 II. French Literature. Lectures on principal authors of the 18th century. Collateral reading. Course for 1894–95, alternating with 5 I. Junior and Senior Elective; first term [2]. Professor Harper. *Beaumarchais:* Le Barbier de Séville. *Musset:* Fantasio and On ne badine pas avec l'Amour. *Hugo:* Hernani.

6 II. French Literature. Lectures on 19th century authors. Collateral reading. Course for 1894–95, alternating with 6 I. Junior and Senior Elective; second term [2]. Professor Harper. *Augier:* Comedies. *Balzac:* Eugénie Grandet.

7. Medieval French Literature. Lectures, themes and collateral reading. The chronicles of *Villehardouin*, *Joinville*, and *Froissart*. Graduate course; first term [2]. Professor Harper.

8. Medieval French Literature. Lectures, themes and collateral reading. The development of lyric poetry. *Charles D'Orléans*, *Villon*. Graduate course; second term [2]. Professor Harper.

9, 10. French Literature of the Renaissance. Lectures, themes and collateral reading. *Commines*, *Marot*, *Rabelais*, *Ronsard*, *Montaigne*, *Amyot*. Graduate course; both terms [2]. Professor Harper.

11, 12. Old French Readings. Senior Elective; both terms [2]. Dr. Lewis. This course is intended to give the student a good reading knowledge of Old French, as well as to acquaint him with the literature of the period. *Gaston Paris:* Extraits de la Chanson de Roland is first read, then *Suchier:* Aucassin et Nicolete, *Warnke:* Die Lais der Marie de France, *Koschwitz:* Karls Reise, and *Foerster:* Cligès.

13, 14. Old French Philology. Graduate course; both terms [2]. Dr. Lewis. The lectures on Old French etymology and morphology, given in this course, bear mainly on the subject-matter contained in *Schwan:* Grammatik des Altfranzösischen and *Suchier:* Le français et le provençal.

15. Physiological Phonetics. Graduate course; first term [2]. Dr. Lewis. This course consists entirely of lectures, at first on general physiological phonetics, and later on French phonetics; the required books are: *Sweet:* A Primer of Phonetics, *Beyer:* Französische Phonetik, and *Passy:* Le français parlé.

16. French Dialects. Graduate course; second term [2]. Dr. Lewis. The first lectures are on the Franco-Norman and the Anglo-Norman dialects, and deal with such old Norman texts as the Chanson de Roland, the Lais of Marie de France, the Makkabäer and others, and, later, with the modern patois of Normandy and the Channel Islands.

XVI. Italian.

PROFESSOR HARPER.

1. Elementary Italian. Junior and Senior Elective; first term [2]. *Grandgent:* Grammar. Modern short stories.

2. Dante: Inferno. Junior and Senior Elective; second term [2].

3. Dante: Purgatorio. Senior Elective; first term [2].

4. Dante: Paradiso. Senior Elective; second term [2].

5, 6. Dante and his age. Lectures, themes and collateral reading on Dante's predecessors and contemporaries, and his Italian works other than the Divina Commedia. Graduate course; both terms [2]. Professor Harper.

XVII. Spanish.

DR. LEWIS.

1, 2. Modern Spanish. Junior and Senior Elective; both terms [2]. Dr. Lewis. After finishing *Edgren:* Spanish Grammar, Partir á tiempo, Tu amor ó la muerte, Un desafío, and El Indiano are read; these plays are followed by *Knapp:* Modern Spanish Readings.

An optional course in SLAVONIC LANGUAGES is offered to Seniors by Mr. Herdler. The Russian, Polish and Bohemian grammars will be studied.

DEPARTMENT OF MATHEMATICS AND NATURAL SCIENCE.

XVIII. Mathematics.

PROFESSORS DUFFIELD, FINE, AND THOMPSON, DR. CHITTENDEN AND MR. HINTON.

1a. Solid and Spherical Geometry and Mensuration. Freshman Required; first term [3]. Professor Thompson, Mr. Hinton, or Dr. Chittenden. *Wells:* Geometry (Revised Edition).

2a. Trigonometry. Freshman Required; second term [3]. Professor Thompson, Mr. Hinton, or Dr. Chittenden. *Wells:* Plane and Spherical Trigonometry.

3. Selected portions of Algebra. Freshman Required; first term [1]. Professor Thompson. *Wells:* College Algebra.

4. Elementary Theory of Equations. Freshman Required; second term [1]. Professor Thompson. *Wells:* College Algebra.

1b, 2b. Trigonometry and Theory of Equations, advanced course. Open only to those who have passed the maximum mathematics for entrance. Freshman Elective (substitute for 1a or 2a); both terms [3]. Professor Thompson.

5. Conic Sections, treated from the Cartesian standpoint. Sophomore Required; first term [3]. Professor Fine, Dr. Chittenden, or Mr. Hinton. *C. Smith:* Conic Sections (Chapters I–IX.)

7, 8. Differential and Integral Calculus. Sophomore Elective; both terms [2]. Professor Fine. *Osborn:* Differential and Integral Calculus.

9, 10. Calculus and Elementary Differential Equations. Junior and Senior Elective; both terms [2]. Professor Fine. Lectures. *W. Johnson:* Differential Equations.

11. Conic Sections. Junior and Senior Elective; first term [2]. Professor Thompson. Lectures. *C. Smith:* Conic Sections (Chapters X–XIV).

12. Analytic Geometry of Three Dimensions; the plane, straight line and quadric surface. Junior and Senior Elective; second term [2]. Professor Thompson. *C. Smith:* Solid Geometry.

14. (Physics 6). Analytical Mechanics. Junior and Senior Elective; second term [2]. Professor Magie.

15. Analytic Geometry of Three Dimensions; theory of surfaces and curves. Senior Elective; first term [2]. Professor Thompson. Lectures. *C. Smith:* Solid Geometry. (For 1894–95 this course will be Higher Plane Curves.)

16. Higher Plane Curves. Senior Elective; second term [2]. Professor Thompson. *Salmon:* Higher Plane Curves.

17. Theory of Functions, elementary course. Senior Elective and Graduate course; first term [2]. Professor Fine. Lectures. Given as a Graduate course only 1894–95.

18. Elliptic Functions. Senior Elective and Graduate course; second term [2]. Professor Thompson.

19, 20. Differential Equations, general course, embracing Lie's transformation theory. Graduate course; both terms [2]. Professor Fine.

21, 22. Theory of Numbers and Higher Algebra, including theory of substitutions and the arithmetical theory of the algebraic equation. Graduate course; both terms [2]. Professor Fine. Lectures. *Dirichlet-Dedekind:* Zahlentheorie.

23, 24. Higher Metrical Geometry. Graduate course; both terms [2]. Professor Fine. *Darboux:* Leçons sur la Theorie des Surfaces.

XIX. Astronomy.

PROFESSORS YOUNG AND REED.

1. Elementary Astronomy. Lectures, recitations from text book. Junior Elective; first term [2]. Professor Young. *Young:* Elements of Astronomy.

3. General Astronomy. Extended course—Astronomical instruments and methods; the determination of the principal astronomical constants; eclipses; undisturbed planetary motion; spectroscopic astronomy. Lectures and recitations. Senior Elective; first term [2]. Professor Young. *Young:* General Astronomy.

5, 6. Practical Astronomy. Determination of time, latitude, azimuth, and the positions of planets or comets. Spectroscopic observation of the sun. Recitations and observatory work. Senior Elective; both terms [2]. Professor Reed. *Campbell:* Practical Astronomy. *Chauvenet:* Practical Astronomy.

7, 8. Theoretical Astronomy and the calculation of orbits. Graduate course; both terms [1]. Professors Young and Reed. *Watson:* Theoretical Astronomy. *Oppolzer:* Bahn-bestimmung. *Klinkerfues:* Theoretische Astronomie.

9, 10. Practical Astronomy. The same as courses 5, 6, but with additions. Recitations and observatory work. Open to graduates who did not take it in Senior year; both terms [2]. Professor Reed. *Campbell:* Practical Astronomy. *Chauvenet:* Practical Astronomy.

XX. Physics.

PROFESSORS BRACKETT AND MAGIE, MR. WATERMAN AND DR. LOOMIS.

2. Elementary Mechanics; mechanics of masses and molecular mechanics. Sophomore Required; second term [2]. Professor Magie and Dr. Loomis. *Selby:* Elementary Mechanics.

3. General Physics; molecular mechanics, sound, heat, electricity, light. Recitations and experimental lectures. Junior Required; first term [3]. Professor Magie. *Anthony and Brackett:* Elementary Text-Book of Physics.

4 1. Theory of Heat, with lectures on thermodynamics and on van der Waal's theory of a gas. Given 1895–96, alternating with

4 II. Junior and Senior Elective; second term [2]. Professor Magie. *Maxwell:* Theory of Heat.

4 II. Theory of Light, with experimental demonstrations. Given 1894–95, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Magie. *Preston:* Theory of Light.

6. Analytical Mechanics. (Math. 14.) The elements of the subject, open to those who have taken Mathematics 9. Junior and Senior Elective; second term [2]. Professor Magie.

7. Practical Physics; experimental work in mechanics and heat, with collateral lectures and recitations. Senior Elective; first term [2]. Mr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. I.

8. Practical Physics, experimental work in electricity, with lectures on the theory of electrical measurements. Senior Elective; second term [2]. Mr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. II.

9. Theory of Electricity; open to those who have taken Mathematics 9, 10. Senior Elective; first term [2]. Professor Magie. *Emtage:* Electricity and Magnetism.

11, 12. Laboratory Practice; advanced measurements and special investigations. Graduate course; both terms. Professor Magie and Mr. Waterman. (The physical laboratory is open throughout the week to graduate students.)

13, 14. Mathematical Physics; heat, light, electricity and magnetism. Graduate course, (given on application); both terms [2]. Professor Magie.

XXI. Chemistry.

PROFESSORS CORNWALL AND MCCAY, AND MR. NEHER.

2. General Chemistry: experimental lectures and recitations. Sophomore Required; second term [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

3. General Chemistry. Organic and theoretical chemistry. Junior Elective; first term [2]. Professor McCay. *Remsen:* Theoretical Chemistry.

5. Laboratory Chemistry: lectures, recitations and laboratory work; on qualitative analysis of simple salts; experimental chemistry; sugar, milk, drinking water, poisons, and the more impor-

tant organic compounds. Senior Elective (open only to those who have taken course 3); first term [2]. Professor Cornwall and Mr. Neher.

XXII. Physical Geography.

PROFESSOR LIBBEY.

2. Physical Geography. Physical geography proper; morphology of the continents, oceanography, climatology. Senior Elective; second term [2]. Professor Libbey. *Guyot:* Physical Geography.

4. Physical Geography. The relations of physical geography to the history of mankind. Graduate course (open to those who have taken geology and physical geography); second term [1]. Professor Libbey.

XXIII. Geology.

PROFESSOR SCOTT.

2. Geology, elementary course; general outline of the subject, including dynamical, structural and historical geology. Junior Elective, except for those who elect 3, 4; second term [2]. Professor Scott. *Geikie:* Class Book of Geology.

3 I, 4 I. Physical Geology. Advanced course in dynamical and structural geology, with provision for laboratory and field work. Given 1893–94 (alternating with 3 II, 4 II.) Junior and Senior Elective; both terms [2]. Professor Scott. *Green:* Geology for Students.

3 II, 4 II. Historical Geology. Advanced course; the detailed study of the formations, their stratigraphy, palæontology, distribution and economic products. Given 1894–95, (alternating with 3 I, 4 I). Junior and Senior Elective; both terms [2]. Professor Scott. *Dana:* Manual of Geology. *Kayser:* Text Book of Comparative Geology.

XXIV. Biology.

PROFESSORS MACLOSKIE, SCOTT, AND LIBBEY, DR. RANKIN, AND MR. MCCLURE.

1. Elements of Zoology and Botany. Lectures on general botany, with practical work in the examination of plants, followed

by lessons in zoology. Sophomore Required; first term [2]. Professor Macloskie and Dr. Rankin. *Macloskie:* Elementary Botany. *Packard:* Elementary Zoology.

3. General Biology. Lectures on the principles of biological science, and dissections, with microscopic work, of invertebrate animals. Junior Elective; first term [2]. Professor Macloskie and Dr. Rankin. *Marshall and Hurst:* Practical Zoology.

4. Practical Botany. Laboratory work in vegetable anatomy, histology, and medical botany. Junior Elective; second term [2]. Professor Macloskie and Dr. Rankin. *Bower:* Practical Botany. *Spalding:* Introduction to Botany.

6. Vertebrate Anatomy. Lectures and dissections of vertebrates. Junior Elective; second term [2]. Mr. McClure. *Marshall and Hurst:* Practical Zoology. *Wiedersheim:* Comparative Anatomy of Vertebrates. *Huxley:* Comparative Anatomy of Vertebrates.

8. Normal Histology. Lectures, demonstrations and laboratory practice in microscopical anatomy. Junior and Senior Elective; second term [2]. Professor Libbey. *Schaefer* and *Prudden.*

9. Comparative Osteology. Lectures and study of skeletons in the museum. Only for students contemplating the medical profession. Senior Elective; first term [2]. Professors Macloskie and Scott. *Flower:* Osteology of the Mammalia. *Parker and Bettany:* Morphology of the Skull.

10. Practical Histology. Practical work in hardening, injection, section cutting, etc., involved in histology. Senior Elective (open only to those who have taken 8 in the Junior year); second term [2]. Professor Libbey. *Whitman.*

11. Physiology. Lectures on methods and results, including the functions of the body in health and disease. Senior Elective; first term [2]. Professor Macloskie. *Martin:* Human Body. *Foster:* Physiology.

12. Embryology, practical work and lectures. Senior Elective; second term [2]. Mr. McClure. *Foster and Balfour:* Elements of Embryology. *Hertwig:* Embryology. *Minot:* Human Embryology.

13. Mammalian Anatomy. Senior Elective; first term [2]. Mr. McClure.

14. Palæontology; morphology of the extinct vertebrates and phylogeny of existing forms. Senior Elective; second term [4]. Professor Scott. *Huxley:* Anatomy of Vertebrates.

Students entering for *Special Honors in Biology* must have attained a rank equivalent to second group in 1, or qualify themselves by a special examination for this rank, and pursue 8–14 inclusive under the usual regulations of Special Honor work. In place of the separate theses in the Senior courses, the student may select a thesis from one of the courses, which must show a higher standard of work. To fill the six hours elective work Seniors must elect Chemistry 5, or Physics 7.

In course 6 a fee of $4.50 is charged for the use of laboratory instruments, reagents and material, subject to a drawback.

In course 8 a fee of $10 is charged to cover mounting material, slides, etc., as each student retains the set of specimens prepared as his own.

Students who contemplate entering the medical profession may combine the Electives in Biology and Chemistry, so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges which have a four years' course.

EXHIBIT OF STUDIES FOR 1894–95.

NOTE.—The numbers indicate hours per week. Oratory and Essays are required throughout the four years. There is a required course in English in the Freshman year, conducted by the Department of Oratory, outside of schedule hours.

Each elective course takes two hours weekly, except in special cases.

FRESHMAN YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin,	4	Latin,	4
Greek,	4	Greek,	4
Mathematics,	4	Mathematics,	4
Bible,	1	Bible,	1
	13 hours.		13 hours.

ELECTIVE.

(Student to take one Elective—2 hours.)

German,	2	German,	2
French,	2	French,	2
	15 hours.		15 hours.

SOPHOMORE YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin,	2	Latin,	2
Greek,	2	Greek,	2
Mathematics,	3	English,	2
History,	2	Chemistry,	2
Zool. and Bot.,	2	Mechanics,	2
	11 hours.		10 hours.

ELECTIVE.

(Student to take two Electives—4 hours.)

Latin,	2	Latin,	2
Greek,	2	Greek,	2
Mathematics,	2	Mathematics,	2
French,	2	French,	2
German,	2	German,	2
	15 hours.		14 hours.

JUNIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Physics,	3	Logic,	3
Psychology,	2	Political Economy,	2
	5 hours.		5 hours.
Five Electives,	10 hours.		10 hours.
	15 hours.		15 hours.

JUNIOR ELECTIVE COURSES.

The Elective Courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Juniors only.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy* *Plato* (*Greek* 10) Exper. Psych.
HISTORY, JURISPRUDENCE AND POLITICS.	
History, IV 5	History, IV 6
Public Law	*Const. Law*
ARCHÆOLOGY AND ART.	
Art 1	*Art* 2
CLASSICS.	
Aristophanes	*Plato*
Juvenal	Seneca
	Plautus

ENGLISH.

English 5	English 6
Old English, XI 7	*Middle English*, XI 8

MODERN LANGUAGES.

German 5	German 6
French 5	*French* 6
Italian 1	*Italian* 2
Spanish 1	*Spanish* 2

MATHEMATICS.

Mathematics 9	*Mathematics* 10
Mathematics 11	*Mathematics* 12
	Anal. Mech.

PHYSICAL SCIENCE.

Astronomy 1	*Anal. Mech.*
Theor. Chemistry	*Physics* 4

NATURAL SCIENCE.

Biology 3	Biology 4
Geology 3	*Geology* 4
	Geology 2
	Histology, XXIV 8
	Vert. Anatomy XXIV 6

JUNIOR ELECTIVE EXCLUSIONS.

In the list of Junior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
{ *Public Law*	{ *Const. Law*
{ *Art* 1	{ *Art* 2
{ *Astronomy* 1	{ *Geology* 2
{ *Spanish* 1	{ *Spanish* 2
Geometry 11	{ *Geometry* 12
	Plautus 12
	Mid. English
	Vert. Anat. 6

English Lit. 5	English Lit. 6
Hist. of Phil.	*Hist. of Phil.*
Ancient History	Medieval History
Bible	*Bible*
Theoretical Chemistry	Seneca 10
Juvenal 9	Pract. Bot. 4
Old English	
Aristophanes	Exp. Psychology
Biology 8	*Plato* 10
Diff. Equations	*Diff. Equations*
German	German
Geology 8	*Geology* 4
	Anal. Mech. 6
Italian 1	*Italian* 2
	Physics 4
	Histology 8
French Lit.	*French Lit.*

SENIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Ethics,	2 hours.	Ev. of Christianity,	1 hour
Six Electives,	12 hours.		12 hours.
	14 hours.		18 hours.

ELECTIVE COURSES.

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Seniors only.

SENIOR ELECTIVE COURSES.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy*
Advanced Logic	Advanced Logic
Physiological Psychology	Science and Religion
Aristotle	*Plato*
Theism	Theism
Metaphysics	Outlines of Philosophy.
Experimental Psychology	Experimental Psychology
General Psychology	General Psychology
Lucretius	Lucretius

HISTORY, JURISPRUDENCE AND POLITICS.

History	History
Jurisprudence 3	*Jurisprudence* 4
Jurisprudence 5	Jurisprudence 6
Roman Law	Roman Law
Finance	History of Pol. Econ.
Hist. and Pol. 9	

ARCHÆOLOGY AND ART.

Art 1	*Art* 2
Art 3	Art 4
Art 5	Art 6

CLASSICS (WITH SANSKRIT).

Sanskrit 1	Sanskrit 2
Greek 9	*Greek* 10
Greek 11	Greek 12
Greek 13	Greek 14
Latin 9	
Latin 13	Latin 14
Latin 15	Latin 16
Roman Law	Roman Law
Hebrew	Hebrew

ENGLISH.

English Literature	English Literature
Anglo-Saxon	*Middle English*
Gothic	Old English
Poetics	Prose Fiction
	American Literature

MODERN LANGUAGES.

German 7	German 8
Mid. High German	Mid. High German
Old High German	Old Norse
French Literature	*French Literature*
Old French	Old French
Italian 1	*Italian* 2
Italian 3	Italian 4
Spanish 1	*Spanish* 2

MATHEMATICS.

Mathematics 9	*Mathematics* 10
Mathematics 11	*Mathematics* 12
Mathematics 15	Mathematics 16
Mathematics 17	Mathematics 18
	Analytical Mechanics

PHYSICAL SCIENCE.

Astronomy 8	*Analytical Mechanics*
Practical Astronomy	Practical Astronomy
Physics 9	*Physics* 4
Practical Physics	Practical Physics

NATURAL SCIENCE.

Laboratory Chemistry	Physical Geography
Geology 8	*Geology* 4
Physiology 11	Embryology
Compar. Osteology	Histology 10
Mammalian Anatomy	Palæontology
	Histology 8

SENIOR ELECTIVE EXCLUSIONS.

In the list of Senior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
Gothic, Comp. Pol. 7, Higher Plane Curves, Osteology	Embryology, Latin 16, Higher Plane Curves
Quintilian	Palæontology, Higher Plane Curves
Public Law, *Art* 1	*Const. Law*, *Art* 2, Old French, Amer. Lit.
Theism, Practical Physics, *Spanish* 1, Sanskrit	Theism, Practical Physics, *Spanish* 2

Old French Greek 11 *Geometry* 11 Mammalian Anatomy Hebrew	*Middle English* Greek 12 *Geometry* 12 Histology 10
Lucretius Art 8 Astronomy 8 History of Law	Cicero 14 Art 6 English Com. Law
Physiology Aristotle	Hebrew Sanskrit Outlines of Philosophy
History of Philosophy	*History of Philosophy*
Lab. Chemistry German 7 *Bible*	German 8 *Bible*
Adv. Exp. Psychology History Theory of Functions *Juvenal* Old English	Adv. Exp. Psychology History Theory of Functions
Finance Mid. High German Physiology *Differential Equations*	History of Pol. Econ. Mid. High German *Plato* *Differential Equations*
Art 5 Advanced Logic Italian 3 *Aristophanes*	Art 4 Advanced Logic Science and Religion Physical Geography
Old High German Metaphysics Hebrew Physics 9 *Geology* 3	Old Norse Italian 4 Hebrew *Anal. Mechanics* *Geology* 4
Physiological Psychology *Italian* 1 Aristotle 18	*Histology* 8 *Physics* 4 *Italian* 2 English Literature

English Literature	Palæontology Odyssey
French Literature	French Literature
Roman Law Practical Astronomy Poetics Advanced Gen. Psychol.	Roman Law Practical Astronomy Prose Fiction Advanced Gen. Psychol.

REGULATIONS FOR GENERAL AND SPECIAL HONORS.

Honors are of two kinds, General and Special, and in each kind there are two degrees of distinction, High Honors and Honors. In very exceptional cases the Faculty may also bestow the further distinction of Highest Honors, either General or Special.

I. General Honors are awarded for general excellence in studies at the close of each academic year, according to the following provisions:—At the close of the Freshman, Sophomore and Junior years, High General Honors are given to those whose average rank for the year is within the First General Group, and General Honors to those whose average rank for the year is within the Second General Group. At graduation, High General Honors are given to those whose final average rank for the whole academic course is within the First General Group, and similarly General Honors to those within the Second General Group.

II. Special Honors are awarded for excellence in single leading departments of study at the close of the Sophomore year and at graduation, according to the following provisions: The Second-Year Special Honors at the close of the Sophomore year, are given in the following departments: Latin, Greek, Mathematics. Only those whose average rank for the year in all their Sophomore courses is not below the Third General Group, are eligible for Second-Year Special Honors. Such of these as maintain a first group rank in the Freshman and Sophomore courses belonging to the department in which Special Honors are sought, receive High Honors, and similarly those who maintain a second group rank receive Honors.

The Final Special Honors are awarded at graduation in the following departments: 1. Philosophy; 2. History, Jurisprudence and Politics; 3. Archæology and Art; 4. Classics; 5. Modern Languages; 6. English; 7. Mathematics; 8. Physical Science; 9. Natural Science. Only those whose final average rank for the whole academic course is not below the Third General Group are eligible for Final Special Honors. Such of these as maintain a first group standing in at least nine of any ten courses in one of the above departments, pursuing four of these courses in Junior year, and six in Senior year, receive High Honors, and the others who maintain an average first group rank in their ten courses receive Honors.

In departments where less than ten Junior and Senior courses are available for Special Honors, the necessary number of additional courses must be taken from a cognate department.

Students who intend to study for Special Honors shall give written notice of their intention to the Registrar, when they hand in their lists of electives at the beginning of Sophomore or Senior year.

ACADEMIC FRESHMAN FIRST TERM SCHEDULE.—1894–95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I French [4 II French [2 I German [5 II German [3	I French [4 II French [2 III Bible [5 V Latin 1 δ [14 3	I Latin 3b δ [3 III Latin 1 δ [4 V Latin 3b ε [2	I Bible [10 III Latin 1 δ [14 V Latin 8a γ [13
9	II Math 1 γ [9½ IV Math 1 δ [10½	III French [4 IV French [2 III German [3	III French [4 IV Bible [2 VI Latin 1 δ [14 3	II Latin 3b ε [3 IV Latin 1 δ [4 VI Bible [10	II Bible [10 IV Latin 1 δ [14 VI Latin 3a γ [13
10	I Math 1 δ [10½ III Math 1 γ [9½	I Math 8 β [10 V Math 1 γ [9½ VI Math 1 δ [10½	I Greek δ [2 III Greek ε [8 V Latin 1 δ [14 V Bible [4	I Greek δ [2 III Greek ε [8 V Greek ε [4	I Greek δ [2 IV Latin 3a γ [13 V Greek ε [8	I Greek δ [2 III Latin 3a γ [13 V Greek ε [8
11	V Math 1 γ [9½ VI Math 1 δ [10½	II Math 8 β [10 III Math 1 γ [9½ IV Math 1 δ [10½	II Greek δ [2 IV Greek ε [5 VI Latin 1 δ [14 VI Latin 3b ε [3	II Greek δ [2 III Latin 3b ε [3 VI Greek ε [2	II Greek δ [8 IV Latin 3b ε [3 VI Greek ε [2	II Greek δ [2 IV Latin 3b ε [3 VI Greek ε [8
3						
4	II Math 1 γ [9½ IV Math 1 δ [10½ V Math 8 β [10	I Math 1 δ [10½ II Math 1 γ [9½ III Math 8 β [10		I Latin 1 δ [14 III Greek ε [8 V Greek ε [2	I Latin 1 δ [14 III Greek ε [8 V Greek δ [2	
5	I Math 1 δ [10½ III Math 1 γ [9½ VI Math 8 β [10	IV Math 8 β [10 V Math 1 γ [9½ VI Math 1 δ [10½		II Latin 1 δ [14 IV Greek δ [2 VI Greek ε [8	II Latin 1 δ [14 IV Greek ε [8 VI Greek δ [2	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.
The hour in required English will be arranged by the instructors in that department.

ACADEMIC FRESHMAN SECOND TERM SCHEDULE.—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I French 2 α [4 III French 2 β [3 I German 2 α [5 II German 2 β [7	I French 2 α [4 III French 2 β [3 I German 2 α [5 II German 2 β [7	I Latin 4 γ [13 III Greek 2 δ [8 V Latin 2 δ [14	I Latin 4 γ [13 III Latin 2 δ [14 V, VI Bible [7	I, II Bible [7 V Latin 4 γ [13
9	II Math 2 δ [10½ IV Math 2 γ [9½	II French 2 α [4 IV French 2 β [3 III German 2 α [5 IV German 2 β [7	II French 2 α [4 IV French 2 β [3 III German 2 α [5 IV German 2 β [7	I Greek 2 α [7 II Latin 4 γ [13 IV Greek 4 δ [8 VI Latin 2 δ [14	II Latin 4 γ [13 IV Latin 2 δ [14	III, IV Bible [7 II Greek 2 δ [8 VI Latin 4 γ [13
10	I Math 2 γ [9½ III Math 2 δ [10½	I Math 4 β [10 V Math 2 δ [10½ VI Math 2 γ [9½	I Greek 2 α [7 III Latin 4 γ [13 V Latin 2 δ [14	III Latin 4 γ [13 V Greek 2 α [7	I Greek 4 γ [2 III Greek 2 δ [8 V Greek 2 α [7	I Greek 4 γ [2 III Latin 2 δ [14 V Greek 4 δ [8
11	V Math 2 δ [10½ VI Math 2 γ [9½	II Math 4 β [10 III Math 2 δ [10½ IV Math 2 γ [9½	II Greek 2 δ [8 IV Latin 4 γ [13 VI Latin 2 δ [14	II Greek 4 γ [2 IV Latin 4 γ [13 VI Greek 2 α [7	II Greek 4 γ [2 IV Greek 4 δ [8 VI Greek 2 α [7	IV Latin 2 δ [14 VI Greek 4 δ [8
3						
4	II Math 2 δ [10½ IV Math 2 γ [9½ V Math 4 β [10	I Math 2 γ [9½ II Math 2 δ [10½ III Math 4 β [10		I Latin 2 δ [14 III Greek 4 γ [2 V Greek 4 δ [8	I Latin 2 δ [14 III Greek 4 γ [2 V Latin 4 γ [13	
5	I Math 2 γ [9½ III Math 2 δ [10½ VI Math 4 β [10	IV Math 4 β [10 V Math 2 δ [10½ VI Math 2 γ [9½		II Latin 2 δ [14 IV Greek 2 α [7 VI Greek 4 δ [8	II Latin 2 δ [14 IV Greek 2 α [7 VI Latin 4 γ [13	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.

ACADEMIC SOPHOMORE FIRST TERM SCHEDULE.—1894–95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I Greek α [7	II Greek α [7	IVb, VI HISTORY	I German [5	I German [5
9	I Greek α [7	II Greek α [7	I MATH [9 III MATH [9½ V MATH [10½ III Latin [13	I MATH [9 III MATH [9½ V MATH [10½ III Latin [13	I MATH [9 III MATH [9½ V MATH [10½ II,IV,VI Zo & BOT.	II,IV,VI Zo.& BOT. I, IIIa HISTORY II German [5
10	I LATIN α [8 III GREEK β [12 V LATIN β [14	I LATIN α [8 III GREEK β [12 V LATIN β [14	II MATH [9 IV MATH [9½ VI MATH [10½ II Latin [13	II MATH [9 IV MATH [9½ VI MATH [10½ II Latin [13	II MATH [9 IV MATH [9½ VI MATH [10½ II German [5	IIIb, V HISTORY III German [5
11	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	I Latin [13	I Latin [13	I, III,V Zo & BOT III German [5	I, III, V Zo.& BOT. II, IVa HISTORY
8	I GREEK β [12 III LATIN ε [14 V GREEK γ [2	I GREEK β [12 III LATIN ε [14 V GREEK γ [2		I, IIIa HISTORY	II, IVa HIST [5	
4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4		IIIb, V HISTORY II Math [9	IVb, VI HISTORY II Math [9	
5	II French [3 I French [4	II French [3 I French [4		I Math [9	I Math [9	

Required studies in SMALL CAPITALS. Roman Numerals indicate divisions, Arabic numerals after brackets indicate rooms.

Divisions independent in Required Classics and Required Mathematics. History, Zoology and Botany take mathematical divisions.

ACADEMIC SOPHOMORE SECOND TERM SCHEDULE.—1894–95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I Greek γ [2	I Greek γ [2		I German [3 II German [5	I German [3 II German [5
9	II Greek γ [2	II Greek γ [2	I, II CHEM III Latin	I, II CHEM III Latin	III German [3	III German [3
10	I LATIN α [8 III GREEK β [12 V LATIN ε [14	I LATIN α [8 III GREEK β [12 V LATIN ε [14	I Latin	I Latin	I MECHANICS [10 III ENGLISH IV German [3	I MECH [10 III MECH [10½ IV German [3
11	II LATIN α [8 IV GREEK β [12 VI LATIN ε [14	II LATIN α [8 IV GREEK β [12 VI LATIN ε [14	III, IV CHEM II Latin	III, IV CHEM II Latin	II MECH [10 IV ENGLISH	II MECH [10 IV MECH [10½
3	I GREEK β [12 III LATIN ε [14 V, VI GREEK δ [2	I GREEK β [12 III LATIN ε [14 V, VI GREEK δ [2		I, II ENGLISH	I ENGLISH III MECH [10½	
4	II GREEK δ [2 IV LATIN ε [14 III French [4	II GREEK δ [2 IV LATIN ε [14 III French [4		III, IV ENGLISH II Math [9	II ENGLISH IV MECH [10½ II Math 9	
5	II French [3 I French [4	II French [3 I French [4		I Math [9	I Math [9	

Chemistry and English take Mechanics divisions.

ACADEMIC JUNIOR FIRST TERM SCHEDULE.—1894–95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I PHYSICS	Engl. Lit. 5	Engl. Lit. 5	*Italian* 1	*Italian* 1
9		II PHYSICS	*Hist. of Phil.*	*Hist. of Phil.*	I PSYCHOLOGY	I PSYCHOLOGY
10	*Public Law* *Art* 1	*Public Law* *Art* 1	Ancient Hist. *Bible*	Ancient Hist. *Bible*	*French Lit.* 5	*French Lit.* 5
11	Astronomy 1 *Spanish* 1	Astronomy 1 *Spanish* 1	Theor. Chem., 3 *Juvenal*, 9 *Old English*	Theor. Chem., 3 *Juvenal*, 9 *Old English*	II PSYCHOLOGY German	II PSYCHOLOGY German
3	*Geometry* 11	*Geometry* 11		Biology 3 *Diff. Equations*	Biology 3 *Diff. Equations*	
4	I PHYSICS	I PHYSICS		*Aristophanes*	*Aristophanes*	
5	II PHYSICS	II PHYSICS		*Geology* 3	*Geology* 3	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC JUNIOR SECOND TERM SCHEDULE.—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I LOGIC	Engl. Lit. 6	Engl. Lit. 6	*Physics* 4 *Italian* 2 *Histology*, 8.	*Physics* 4 *Italian* 2 *Histology* 8
9		II LOGIC	*Hist. of Phil.*	*Hist. of Phil.*	I POL. ECON.	I POL. ECON.
10	*Const. Law.* *Art* 2	*Const. Law.* *Art* 2	Med. History *Bible*	Med. History *Bible*	*French Lit.* 6	*French Lit.* 6
11	Geology 2 *Spanish* 2	Geology 2 *Spanish* 2	Seneca 10 Prac. Bot. 4	Seneca 10 Prac. Bot. 4	II POL. ECON.	II POL. ECON.
8	Plautus 12 *Geom.* 12 *Mid. English* Vert. Anat. 6	Plautus, 12 *Geom.* 12 *Mid. English* Vert. Anat. 6		Ex. Psy. (2 p. m.) *Diff. Equations* *Plato.* 10	Ex. Psy. (2 p. m.) *Diff. Equations* *Plato* 10	
4	I LOGIC	I LOGIC		German	German	
5	II LOGIC	II LOGIC		*Geology* 4 *Anal. Mech.* 6	*Geology* 4 *Anal. Mech.* 6	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR FIRST TERM SCHEDULE.—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		Gothic Comp. Politics 7 H. P. Curves Osteology	Gothic Comp. Politics 7 H. P. Curves Osteology	Physiology Aristotle 18	Phys. Psych. *Italian* 1 Aristotle 18	Phys. Psych. *Italian* 1
9	Quintilian	Quintilian	*Hist. of Phil.*	*Hist. of Phil.*	English Lit. 9	English Lit. 9
10	*Public Law* *Art* 1	*Public Law* *Art* 1	Lab. Chem. 5 German 7 *Bible* 3.	Lab. Chem. 5 German 7 *Bible* 3	*French Lit.* 5	*French Lit.* 5
11	Theism Pract. Physics Sanskrit *Spanish* 1	Theism Pract. Physics Sanskrit *Spanish* 1	Adv. Ex. Psych 17 History *Juvenal* 9 *Old English* Th. of Functions	Adv. Ex. Psych. 17 History *Juvenal* 9 *Old English* Th. of Functions	Roman Law Pract. Astron. Poetics Ad. Gen. Psych 19	Roman Law Pract. Astron. Poetics Ad. Gen. Psych. 19
8	Old French Greek 11 *Geometry* 11 Mamm. Anat. Hebrew	Old French Greek 11 *Geometry* 11 Mamm. Anat. Hebrew		Finance M. H. German 9 Physiology *Diff. Equations*	Finance M. H. German 9 *Diff. Equations*	
4	Lucretius Art 3 Astronomy 3 Hist. of Law	Lucretius Art 3 Astronomy 3 Hist. of Law		Art. 5 Advan. Logic Italian 3 *Aristophanes*	Art 5 Advan. Logic Italian 3 *Aristophanes*	
5	ETHICS	ETHICS		O. H. German Metaphysics Hebrew Physics 9 *Geology* 3	O. H. German Metaphysics Hebrew Physics 9 *Geology* 3	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR SECOND TERM SCHEDULE.—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Embryology	Embryology H. Pl. Curves Latin 16	H. Pl. Curves Palæontology	Latin 16 Palæontology	*Histology* 8 *Physics* 4 *Italian* 2 Engl. Lit. 10	*Histology* 8 *Physics* 4 *Italian* 2 Engl. Lit. 10
9		EV. OF CHR.	*Hist. of Phil.*	*Hist. of Phil.*	Palæontology Odyssey	Palæontology Odyssey
10	*Const. Law* 4 *Art* 2 Old French Amer. Lit.	*Const. Law* 4 *Art* 2 Old French Amer. Lit.	German 8 *Bible* 4	German 8 *Bible* 4	*French Lit.* 6	*French Lit.* 6
11	Theism Pract. Physics *Spanish* 2	Theism Pract. Physics. *Spanish* 2	Adv. Ex. Psy. 18 History Th. of Functions	Adv. Ex. Psy. 18 History Th. of Functions	Roman Law Adv. Gen. Psy. 20 Pract. Ast. Prose Fiction	Roman Law Adv. Gen. Psy. 20 Pract. Astron. Prose Fiction
8	Greek 12 *Geom.* 12 *Mid. English* Histology 10	Greek 12 *Geom.* 12 *Mid. English* Histology 10		Hist. Pol. Econ. M. H. German 10 *Plato* *Diff. Equations*	Hist. Pol. Ec. Mid. H. Germ. 10 *Plato* *Diff. Equations*	
4	Cicero 14 Art 6 Eng. Com. Law	Cicero 14 Art 6 Eng. Com. Law		Art 4 Advan. Logic Science & Rel. Phys. Geog.	Art 4 Advan. Logic Science & Rel. Phys. Geog.	
5	Hebrew Sanskrit Outlines Phil.	Hebrew Sanskrit Outlines Phil.		Old Norse Italian 4 Hebrew *Anal. Mech.* 6 *Geology* 4	Old Norse Italian 4 Hebrew *Anal. Mech.* 6 *Geology* 4	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

JOHN C. GREEN SCHOOL OF SCIENCE.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty room in the College Offices, the evening before the examination begins, or on their arrival the following morning. The first examination for admission will begin in Princeton, on Thursday, June 13th, 1895, at 10 A. M., and will continue through the afternoon of Friday. The second will begin on Tuesday, September 17th, at 10 A. M., and continue through the afternoon of Wednesday. Applicants who have conditions or other deficiencies from the June examination are expected to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations are held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha and Denver; and at preparatory schools and other cities when necessary. The precise places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are very inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission must bring satisfactory testimonials of good moral character and attainments, preferably from their last instructors, and if the candidate has been a member of another college, university, or similar institution, he must produce a certificate from its President or Faculty that he is free from censure in the same.

Candidates for admission to the Freshman class must be at least sixteen years of age.

No candidate is admitted without an examination and a vote of the Faculty.

Immediately after the opening of the College the entering students meet according to announcement for the registration of their names and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other college so long as we are members of the College of New Jersey; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

In the subjoined list of subjects candidates for the courses leading to the degree of Bachelor of Science are required to pass examinations in I, II, III, IV, VI, and in either VII or VIII; candidates for the course in civil engineering are required to pass examinations in I, II, III, IV, V, and in either VII or VIII.

Attention is especially called to the increased requirements and to the announcements that in June, 1896, and thereafter, all applicants will be examined in both VII French and VIII German instead of in only one of the two as at present; and that in June, 1897, and thereafter, applicants for admission to the course in civil engineering will be examined on an additional portion of the algebra, the exact details of which will be announced hereafter.

I. English: English Grammar—Whitney or equivalent; United States History—Johnston, Scott, or equivalent; Essay. For 1895, the theme of the essay will be based on selections from Irving's Sketch Book, and *Warner:* Life of Irving (Harper). For 1896 the books will be: Milton's L'Allegro and Penseroso, Macaulay's Essay on Milton, Longfellow's Evangeline, and Webster's First Bunker Hill Oration.

II. ARITHMETIC: Arithmetic entire, including the metric system, a practical knowledge of which is indispensable.

III. ALGEBRA: Algebra, through the binomal theorem with positive integral exponents, as developed in the first thirty-seven chapters of Wells's University Algebra or equivalent; including evolution, radicals, theory of exponents, quadratic equations involving one and two unknown quantities, ratio and proportion, variation, arithmetical and geometrical progressions, and the binomial theorem with positive integral exponents.

IV. GEOMETRY: Plane and Solid Geometry as presented in the first seven books of Wentworth's Geometry or equivalent.

V. TRIGONOMETRY: Plane Trigonometry, including the analytical theory of the trigonometrical functions and the usual formulae, the use of trigonometrical tables, and the solution of plane triangles, so much for example as is contained in Part 1 of Wells's Essentials of Trigonometry.

VI. LATIN: Grammar, with special attention to parsing, and the retranslation from English into Latin of simple sentences from the first book of Cæsar; Translation, Cæsar (five books of the Gallic War), Cicero (the four orations against Catiline), or equivalents from other Latin authors.

VII. FRENCH: The examination will be upon the general principles of grammar [*Otto:* pp. 28–201; or *Whitney:* Brief French Grammar, pp. 22–111; or *Edgren:* pp. VIII–LXIII, and 27–104], and the ability to translate easy prose; such as the first fifty pages of Whitney's Introductory French Reader or Super's French Reader, or of *G. Sand's* La Mare au Diable, (Macmillan's school edition), or *Erckmann-Chatrian's* Le Conscrit.

VIII. GERMAN: The examination will be upon the general principles of grammar [*Whitney:* pp. 23–158 and 278–284; or *Otto:* pp. 18–253; or *Huss:* pp. 9–101 of the Theoretical Part, the sections with heavy-faced references only], and the ability to translate easy prose; such as *Grimm's* Märchen (Otis's edition, pp. 1–49), or *Boisen's* German Prose (pp. 8–51), or *Joynes's* German Reader, Part II and pp. 85–110 of Part IV.

It is recommended that all candidates should receive instruction in free-hand drawing before their entrance.

PRELIMINARY EXAMINATIONS.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate unless he pass in at least three of the subjects enumerated above, not including both French and German, nor will the preliminary certificate be granted to any candidate more than once.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to an advanced class will be examined in the studies previously pursued by the class they propose to enter and may also be required to pass the regular examinations for admission to the Freshman class. While a certificate of satisfactory work done in any of these studies in another institution will not necessarily excuse from examination, it may in some degree modify the examination, and should therefore always be presented. Examinations for advanced standing are held only in Princeton.

ADMISSION TO SPECIAL COURSES.

Admission to special courses and the regulation of work therein are determined in the same way as for special courses in the Academic department (*vide p.* 27.)

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

The regulations concerning examinations, conditions and the removal of conditions are the same as those for the students of the Academic department and are given on pp. 30–32; excepting that the regulations concerning conditions at the end of the Senior year and concerning thesis requirements are given below under the heading "Graduation."

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student during the term. In computing ranks, each study, elective or required, is estimated relatively to the others according to the number of hours which it occupies in the weekly schedule of lectures and recitations. The conduct of the student and his attendance also affect his standing according to the published rules of the Faculty. The maximum mark is one hundred; the minimum mark for passing in any subject is sixty. A report of the standing of each student is made to his parent or guardian by the Registrar of the College at the close of the first term and at the end of the year. The last report gives the student's standing for the year.

The final rank of a student is calculated from all the marks received by the student during his College course.

GRADUATION.

Each candidate for a degree is required to prepare and submit for the approval of an instructor, appointed by Faculty for the purpose, a graduation thesis. This shall be a design or review of some structure or process or an examination of some work or sub-

ject connected with one of the studies to which the student has given special attention. The subject selected for the graduation thesis must be reported to the Faculty, by the candidates for the degree of C. E. on or before the first Monday of October (October 1, 1894), and by the candidates for the degree of B. S. on or before the second Monday of January (January 14, 1895), of their Senior year. The graduation thesis must be finished by the second Saturday before Commencement (June 1, 1895), and the student may be required to read and defend his thesis in public during Commencement week.

Students who have fulfilled the requirements of their undergraduate courses, passing satisfactory examinations in all their studies and presenting acceptable graduation theses, are ordinarily recommended by the Faculty for the degree attached to the course they have pursued, and, if the recommendation is approved by the Trustees, the degree is conferred at Commencement and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

Any member of the Senior class failing to pass the regular final examinations in but *one* course may, by vote of the Faculty, be allowed a re-examination, and if successful in passing this, may be recommended to receive his degree with his class.

Any member of the Senior class failing to pass the regular final examinations in *two* courses may, by vote of the Faculty, be allowed a re-examination, and if successful in this, may be recommended for a degree *at some time in the next Academic year.*

UNDERGRADUATE COURSES.

Undergraduate courses are provided for the degrees of Bachelor of Science and Civil Engineer.

The undergraduate courses offer, according to the choice of the student, efficient education in the natural sciences in general, or a thorough training in the study of civil engineering, and in various other branches of science, pure and applied. At the same time a liberal education in certain academic studies is secured to all candidates for a degree.

Instruction is given by lectures and recitations—by practice in the laboratories, drawing-rooms, museums and field—and excursions are made to different points of interest.

All candidates for the degree of Bachelor of Science pursue the same studies until the end of Sophomore year. At that time each student makes his election between the course in General Science and the course in Chemistry and he cannot afterward change his course without the permission of the Faculty.

Candidates for the degree of Civil Engineer pursue some studies in common with candidates for the degree of Bachelor of Science, but the divergence of the two courses commences at the very beginning.

Optional Courses.—The optional courses which are offered to the students of the Academic department, as given in the Statements of Courses, are also open to those students of the School of Science who may be fitted to pursue them with profit.

The following symbols are used to indicate the different courses:

a, all courses leading to the degree of Bachelor of Science.

g, the course in General Science.

c, the course in Chemistry.

e, the course in Civil Engineering.

DEPARTMENT OF SCIENCE.

COURSE IN GENERAL SCIENCE (*a*, *g*).

This is intended to afford instruction in science without necessarily specializing in any one department. Election to it must be made at the end of Sophomore year; during the Junior and Senior years the studies are largely elective. The choice of these elective studies is governed by the same rules as are in force in the Academic department as given on p. 36 and in the Regulations concerning Registration given on a later page under "General College Orders."

These electives include many of those given in the Academic department and offer a wide variety of choice. A proper selection of electives in mathematics, mechanics and graphics furnishes a suitable preparation for the graduate course in Electrical Engineering. Students who contemplate entering the medical profession may combine the electives in Biology and Chemistry so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges.

A synopsis of the required and elective studies of the course will be found on a later page.

COURSE IN CHEMISTRY (*a*, *c*).

This course is designed to afford instruction in analytical and technical chemistry, and students electing it enter upon the special studies of the course at the beginning of Junior year.

The synopsis of the course is given on a later page.

DEPARTMENT OF CIVIL ENGINEERING (*e*).

The course in Civil Engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C. E.) The regular course of study occupies four years; but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts who have pursued elective courses in mathematics and Bachelors of Science can ordinarily be prepared for the degree of C. E. by a two-years course in the technical studies

required for that degree. But by a judicious election of elective studies, a candidate for the degree of B. S. in the course in General Science can materially shorten the time which he will need for such preparation after receiving the bachelor's degree.

The regular course of study diverges from that in General Science at the beginning, but not so greatly as to make it difficult to change, if desirable, from one course to the other before the opening of the Sophomore year.

Besides the studies taken in common with the candidates for the degree of Bachelor of Science the technical work covers the following ground. A thorough preliminary training in mathematics is necessary for most of the technical studies.

RATIONAL AND APPLIED MECHANICS AND THEORY OF MACHINES is made to cover a wide field of study, beginning with the general discussion of motions and the action of forces, and ending with the deduction of practical formulas relating to the elasticity and strength of materials, the stability of different structures, the power, efficiency and strength of hydraulic, steam and air motors, and to the various problems which arise in the practice of hydraulic engineers. In dealing with these subjects, rigidly mathematical treatment is generally used, and higher analysis is freely employed wherever it is expedient; yet proper weight is given to methods of graphic analysis, and the student's attention is especially directed to those problems in which such methods are employed with marked advantage.

EXPERIMENTAL MECHANICS aims to familiarize the student with the physical properties of building materials; to teach him by actual experiment how to conduct tests and to deduce therefrom coefficients of strength, elasticity, etc.; how to determine coefficients of hydraulic flow and resistance; and how to gauge, by the aid of indicators and dynamometers, the power of steam and other motors. Under this head come also problems in the erection of structures.

THE PLANNING AND CONSTRUCTION OF ENGINEERING WORKS is treated in lectures. Great stress is laid on the application of correct principles and formulas; on the careful inspection, manipulation and preservation of materials, and on the economic features of various designs and modes of executing them.

An important feature of this part of the course consists of excursions for the examination of rolling mills, bridge works, machine

shops, water works, etc. In these visits the class is accompanied by either the Professor or Assistant Professor of Civil Engineering, and every member is required to make full notes of his observations and of the instruction received during the trip.

GEODESY, beginning with the measurements of lines and angles, extends through different kinds of surveys in the order of their complexity and ends with problems in higher geodesy. The structure, adjustment and use of each instrument are made subjects of special attention, and no student is allowed to participate in any extended field operation until he has acquired a certain dexterity in handling the instruments used therein. A marked feature of the course is the stress laid on the collection and verification of field notes by each student, and on their proper use in the preparation of different kinds of plans, maps and charts of surveys. No error is allowed, in field work or in platting, which is not within the limits observed in current practice.

TOPOGRAPHICAL DRAWING includes the execution, in pen work and colors, of finished plans and maps of various kinds of surveys. Except in the necessary preliminary drill, the drawings invariably represent actual surveys made by the different classes. A rigid adherence to the field notes of each survey and a high degree of finish are required in the execution of these drawings.

The synopsis of the course of study and the description of the laboratory, instruments and apparatus connected with the department are given on later pages.

STATEMENTS OF COURSES.

A number of studies are pursued either together with the Academic classes, or essentially as given in the statements of courses in the Academic department, and under the same instructors.

In the following statements of courses the numbers in brackets indicate the number of exercises a week.

German.

PROFESSOR HUSS, MR. HERDLER, AND DR. STOLLHOFEN.

1. The elements of grammar. Committing German model sentences illustrating the principles of grammar and pronunciation.

Introductory reader. Required study for those who offer French for entrance and excludes from French 1. Freshman *a;* first term [4]; *e;* first term [3]. Mr. Herdler or Dr. Stollhofen. *Huss:* Conversation in German on a grammatical basis. Monthly written recitations.

2. Advanced grammar. Reading literary prose such as Storm's Immensee. Freshman *a*, *e;* second term [2]. Mr. Herdler or Dr. Stollhofen. Monthly written recitations.

3. Reading literary prose such as von Hillern's Höher als die Kirche or Heyse's L'Arrabbiata, special attention being given to the German idioms. Sophomore, *a;* first term [3]; *e;* first term [2]. Mr. Herdler or Dr. Stollhofen.

4. Goethe's Hermann und Dorothea. Introductory scientific prose. The construction of the German period. Sophomore, *a;* second term [3]. Mr. Herdler.

6. Introductory scientific prose. Sophomore, *e;* second term [2]. Dr. Stollhofen.

7. Schiller's dramas with lectures thereon. Junior, *c*, *g* elective; first term [2]. Professor Huss.

8. Lessing's critical writings. Scientific prose. Junior *c*, *g* elective; second term [2]. Professor Huss.

9, 10. Goethe's Faust. Lectures on the medieval epics and on the life works of Klopstock, Lessing, Wieland, Herder, Schiller, and Goethe. Scientific monographs. Senior, *c*, *g* elective; both terms [2]. Professor Huss.

French.

PROFESSOR HUSS, MR. HERDLER, DR. STOLLHOFEN, AND MR. VREELAND.

1. The elements of grammar and pronunciation. Introductory reader. Monthly written recitations. Required study for those who offer German for entrance and excludes from German 1. Freshman *a;* first term [4]; *e;* first term [3]. Dr. Stollhofen or Mr. Vreeland. *Whitney:* Brief French Grammar.

2. Advanced grammar. Reading the easier prose of G. Sand and Daudet (Cameron's edition), special attention being given to French idioms. Monthly written recitations. Freshman, *a*, *e;* second term [2]. Dr. Stollhofen or Mr. Vreeland.

3. Prose-writings of Victor Hugo, Balzac and others. Sophomore, *a*, *e;* first term [2]. Mr. Herdler or Dr. Stollhofen.

4. Scientific prose. Sophomore, *a*, *e*; second term [2]. Mr. Herdler or Dr. Stollhofen.

5. Reading of Racine and Corneille, with lectures on the drama of the 17th century. Junior, *g* elective; first term [2]. Professor Huss.

6. Molière. Lectures. Junior, *g* elective; second term [2]. Professor Huss.

7. Reading of the principal authors of the 18th century. Lectures. Senior, *g* elective; first term [2]. Professor Huss.

8. Reading of representative poets of the 19th century. Lectures. Senior, *g* elective; second term [2]. Professor Huss.

Mathematics.

PROFESSOR ROCKWOOD, MR. BROOKS, AND MR. REID.

1, 2. Algebra with theory of equations. Freshman, *a*, *e*; first term and part of second term [2]. Mr. Brooks and Mr. Reid. *Wells:* College Algebra.

3. Solid Geometry. Freshman, *a*, *e*; first term [1]. Professor Rockwood. *Wentworth:* Geometry.

4a. Spherical Geometry. Freshman, *a*, *e*; part of second term [1]. Mr. Brooks or Mr. Reid. *Wentworth:* Geometry.

4b. Mensuration. Freshman, *a*, *e*; part of second term [1]. Mr. Reid. *Smith:* Examples in Mensuration.

5, 6. Trigonometry; plane and spherical. Freshman, *a*, *e*; first term and part of second term [2]. Mr. Brooks and Mr. Reid. *Wells:* Trigonometry.

7. Analytical Geometry of two dimensions and of three dimensions. Sophomore, *a*, *e*; first term [4]. Professor Rockwood or Mr. Brooks. *Bowser:* Analytic Geometry.

8. Differential and Integral Calculus. Sophomore, *a*; second term [4]. Mr. Brooks.

10. Differential and Integral Calculus. Sophomore, *e*; second term [5]. Professor Rockwood. *Bowser:* Calculus.

Physics.

PROFESSORS BRACKETT AND MAGIE, MR. WATERMAN, AND DR. LOOMIS.

1, 2. General Physics; mechanics, heat, magnetism, electricity, sound, light. Junior, *a*, *e*; both terms [4]. Dr. Loomis. *Anthony and Brackett:* Elementary Text-Book of Physics.

The elective courses in Physics for the Junior and Senior years are the same as those in the Academic department.

General Chemistry.

PROFESSOR MCCAY.

1, 2. Course in General Chemistry. Experimental lectures and recitations. Freshman, *a*, *e*; both terms [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

Applied Chemistry and Mineralogy.

PROFESSOR CORNWALL, MR. NEHER, AND MR. PHILLIPS.

The term "exercises a week" in the statements below means *single hours* for lectures and recitations, but *exercises* of two or two and one-half hours each for laboratory work. Usually where a course embraces both class-room and laboratory work one-fourth of the exercises are in the class-room. Special students are not admitted to work in Analytical Chemistry and Mineralogy without previous examination as to their fitness for the work; and all such students must take the Mathematics of the Freshman year before beginning Mineralogy. Courses 14, 15 and 16 are not open to special students.

1, 2. Qualitative Analysis; including the commoner metals and acids, both in simple and mixed substances. Sophomore, *a*; one term [4]. Professor Cornwall and Mr. Neher. *Fresenius:* Qualitative Chemical Analysis.

3, 4. Quantitative Analysis; introductory course, including simple salts, limestone, coal, felspar, etc., and sugars, milk and similar food analysis. Junior, *c*; first term [2], second term [5]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes.

5. Qualitative Analysis; advanced course. Junior, *c*; first term [2]. Professor Cornwall and Mr. Neher. *Fresenius:* Qualitative Chemical Analysis.

7. Organic Chemistry: lectures and recitations on typical organic compounds, with applications to study of water, foods, poisons, disinfectants, etc. Junior, *c*, *g* elective; first term [2]. Professor Cornwall.

8. Quantitative Analysis; shorter introductory course, including simple salts, sugar, foods, etc.; must be preceded by the lecture course 7. Senior, *g*, elective; second term [4]. Professor Cornwall and Mr. Neher. *Appleton:* Quantitative Analysis.

9, 10. Quantitative Analysis; advanced: including complex substances, Iron, Steel and Technical Analysis in general. Senior, *c;* first term [6], second term [6]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes. *Chemical Periodicals.*

11. Volumetric Analysis. Senior, *c;* first term [1]. Mr. Neher. *Mohr:* Titrirmethode. *Sutton:* Volumetric Analysis.

12. Technical Chemistry; lectures and recitations on applications of Chemistry to Arts and Manufactures; must be preceded by the lecture course 7. Senior, *c, g* elective; second term [1]. Professor Cornwall.

14. Assaying; furnace assay of gold, silver and lead ores; lectures and laboratory work. Senior, *c;* second term. [2]. Professor Cornwall. *Ricketts:* Notes on Assaying.

15 or 16. Determinative Mineralogy (Blowpipe Analysis), preceded by a short course of lectures, including elements of crystallography. Sophomore, *a;* one term [4]; *e;* first term [8]. Professor Cornwall and Mr. Phillips. *Cornwall:* Manual of Blowpipe Analysis and Determinative Mineralogy.

17. Mineralogy; advanced: lectures, recitations and practice in theoretical, determinative and optical mineralogy. Senior, *c, g* elective; first term [1]. Professor Cornwall. *J. D. Dana:* Manual of Mineralogy and Lithology. *Frazer:* Mineralogical Tables.

Biology.

PROFESSORS MACLOSKIE AND LIBBEY, DR. RANKIN, AND MR. MCCLURE.

2. Human Anatomy and Physiology. Lectures, illustrated by skeletons, manikin and diagrams. Freshman, *a;* second term [1½]. Professor Macloskie. *Martin:* Human Body.

3. Elementary Botany. Dissection, description and classification of flowering plants. Sophomore, *a;* first term [2]. Dr. Rankin. *Macloskie:* Elementary Botany. *Gray:* Manual of Botany. (Not given 1894–95).

4. Elementary Zoology. Lectures and demonstrations. Sophomore, *a;* second term [3]. Professor Macloskie. *Packard:* Zoology.

The elective courses in Biology for the Junior and Senior years are the same as for the Academic department. (See earlier page.)

Graphics.

PROFESSOR WILLSON AND MR. TORREY.

The following courses involve recitation and examination upon the theory, as well as practical work in the draughting-room.

1. Elementary Technical Draughting. Line and brush shading; conventional representations; lettering; higher plane curves; motion curves; oblique and orthographic projection; working drawings. Freshman, *a;* first term [3]; *e;* first term [4]. Professor Willson and Mr. Torrey. *Willson:* Theoretical and Practical Graphics.

2. Orthographic projection, continued; working drawings; tracings. Freshman, *e;* first half of second term [3]. Professor Willson and Mr. Torrey.

4. Technical Free-Hand Drawing. Freshman, *a;* first half of second term [3]. Mr. Torrey.

6. Practical graphical work; either bridges, roof trusses, machinery, or sheet metal pattern making. Sophomore, *e;* second term [1]. Professor Willson.

7. Descriptive Geometry; pure, and also as applied to developable, double-curved, and warped surfaces, and including spherical projections and trihedrals. Junior, *e, g* elective; first term [3]. Professor Willson. *Willson:* Theoretical and Practical Graphics.

8. Shades, Shadows, and Perspective; mathematical theory, with applications mainly to architectural subjects. Junior, *e, g* elective; second term [2]. Professor Willson and Mr. Torrey. *Church:* Shades, Shadows, and Perspective. *Wright:* Architectural Perspective.

9a. Stereotomy. Descriptive geometry, applied to the solution of problems in stone-cutting, which are likely to arise in railroad

or architectural construction. Senior, *e*, *g* elective; part of first term [2]. Professor Willson. *Warren:* Stone-Cutting.

9b. Valve Motion. Senior *e*, *g* elective; part of first term [2]. Professor Willson. Lectures.

10. Mechanism (Theory) and Machine Drawing. Senior *e*, *g* elective; second term [2]. Mr. Torrey. *Stahl and Wood:* Elementary Mechanism.

Surveying.

PROFESSOR SMITH.

1. Surveying. Theory and practice with special reference to business life. Junior, *g* elective; first term [2]. Professor Smith.

Mechanics.

PROFESSORS MCMILLAN AND SMITH AND MR. WILKINS.

1, 2. Rational Mechanics; analytic and graphic. Junior, *e*, *g* elective; both terms [8]. Professor Smith and Mr. Wilkins.

3. Elasticity and Strength of Materials. Senior, *e*, *g* elective; second year, *l;* first term [8]. Professor Smith.

5. Roofs and Bridges. Senior, *e;* first term [7]. Professor McMillan and Mr. Wilkins.

6. Stability of Structures. Senior, *e;* second term [8]. Professor Smith.

8. Theory of Machines. Senior *e*, *g* elective; second term [4]. Professor McMillan and Mr. Wilkins. *Rankin:* Steam Engine.

Constructions.

PROFESSORS MCMILLAN AND SMITH.

1. Structural Materials and Tests: Foundations. Senior, *e;* first term [2]. Professor Smith. Lectures and laboratory work.

2. Construction of Water Works. Senior, *e;* second term [2]. Professor Smith. Lectures.

4. Sewerage and Drainage. Senior, *e;* second term [2]. Professor McMillan. Lectures.

6. Roads. Senior, *e;* second term [2]. Professor McMillan. Lectures.

Geodesy.

MR. HARRIS AND MR. WILKINS.

2. Line measurement and farm surveying; recitations and field work. Freshman, *e;* second term [1½]. Mr. Wilkins. *Staley-Gillespie:* Land Surveying.

3. Platting of field notes; topographical drawing in pen work and colors. Sophomore, *e;* first term [5]. Mr. Harris and Mr. Wilkins. *McMillan-Smith:* Topographical Drawing.

4. Transit work and levelling; recitations, field work and mapping. Sophomore, *e;* second term [6]. Mr. Harris. *Staley-Gillespie:* Land Surveying.

5. Town, mine and hydrographic surveying; recitations, field work and mapping. Junior, *e;* first term [4]. Mr. Harris. Lectures.

6. Railroad surveying; recitations, field work and office work. Junior, *e;* second term [5]. Mr. Harris. *Searles:* Field Engineering.

DEPARTMENT OF ELECTRICAL ENGINEERING.

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The special course of study in electricity occupies two years of graduate work.

Requirements for Admission.

I. Graduates of the College, either in the Academic Department or in the John C. Green School of Science, who have taken satisfactory courses, will be admitted to the course in Electrical Engineering without examination.

II. Applicants who are graduates of other colleges must satisfy the Professors in charge that they have sufficient knowledge of mathematics, including differential and integral calculus, of physics and chemistry, and of French and German, to enable them to pursue the course with profit.

III. Applicants who are not graduates of any college may be admitted to the course if they show their fitness for it on examination in mathematics to the completion of the calculus, analytic mechanics, mechanical drawing and descriptive geometry, general and analytical chemistry, geology, astronomy, English language and literature, French and German.

IV. Students, not candidates for a degree, may be received by special arrangements with the Professors in charge.

Course of Study.

First Year:—The mathematical theory of Electricity, *Mascart and Joubert:* Treatise on Electricity, Vol. 1, with reference to Maxwell, Cummin and other authors.

General Electricity, Volume 4 of *Wüllner:* Experimental Physik.

These courses occupy eight hours a week throughout the year.

Elementary Electrical Measurements, with reference to Stewart and Gee, Kohlrausch, Slingo and Brooker, Gray, etc. Two days in the week are left free for this work.

Strength of Materials and Mechanism, each, two hours a week, and Theory of Machines, three hours a week for half the year, are taken with the Senior Class in the Civil Engineering Department.

Second Year:—The Theory of Electrical Measurements. *Fleming:* Alternate Current Transformer. *Kittler.* Four hours a week for half the year. *Mascart and Joubert:* Treatise on Electricity, Vol. 2. Four hours a week for half the year.

Theory of Dynamo Construction. *Thompson:* Dynamo Electrical Machinery, with collateral lectures.

Technical Applications of Electricity in Telegraphy, Electrometallurgy and Electro-chemistry, Electric lighting, Transmission of power. Four lectures a week throughout the year.

Advanced Electrical Measurements and Electrical Testing.

In addition to these courses a meeting is held once a week, at which reports on the current electrical literature are made by the students.

Degree.

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application, he must present a thesis on some subject connected with electrical science.

EXHIBIT OF STUDIES.

NOTE.—The numbers in column indicate exercises per week. The numbers immediately after subjects refer to courses as given on pp. 87-94. The Roman and Arabic numerals in parentheses refer to subjects and courses as given in the Statement of Courses for the Academic Department on pp. 37-59.

COURSE IN GENERAL SCIENCE (*a*, *g*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 3, 5	5	Mathematics 2, 4, 6	5
German 1 or French 1	4	German 2	2
		French 2	2
Graphics 1	3	Graphics 4	1½
General Chemistry 1	2	General Chemistry 2	2
English (XI 1)	2	Anatomy—Biol. 2	1½
		English (XI 2)	2

SOPHOMORE YEAR.

Mathematics 7	4	Mathematics 8	4
German 3	3	German 4	3
French 3	2	French 4	2
Applied Chemistry 1 or Mineralogy 15	4	Applied Chemistry 2 or Mineralogy 16	4
Botany*—Biol. 3	2	Zoology—Biol. 4	3
English	1		

JUNIOR YEAR.

REQUIRED.

Physics (XX 5)	4	Physics (XX 6)	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3

* For 1894-95, replaced by English.

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 7 or 8 exercises.		Student takes 6 or 7 exercises.	
Public Law (v 3)	2	Constit. Law (v 4)	2
Art (vi 1)	2	Art (vi 2)	2
Graphics 7	3	Graphics 8	2
Old English (x 17)	2	Middle English (x 18)	2
Geometry (xviii 11)	2	Geometry (xviii 12)	2
Applied Chem. 7	2	Vert. Anatomy (xxiv 6)	2
Spanish (xvii 1)	2	Spanish (xvii 2)	2
English Lit. (xi 5)	2	English Lit. (xi 6)	2
Surveying 1	2	Anal. Mechanics (xx 6)	2
Geology (xxiii 3)	2	Geology (xxiii 4)	2
Ancient History (iv 5)	2	Med. History (iv 6)	2
Bible	2	Bible	2
Graphics 7	3	Histology (xxiv 8)	2
Italian (xvi 1)	2	Italian (xvi 2)	2
History (iv 3)	2	Physics (xx 4)	2
Diff. Equations (xviii 9)	2	Diff. Equations (xviii 10)	2
Biology (xxiv 3)	2	Exp. Psychology (ii 6)	2
Theor. Chemistry (xxi 3)	2	Pract. Botany (xxiv 4)	2
Applied Mech's 1	3	Applied Mech's 2	3
German 7	2	German 8	2
French 5	2	French 6	2
Applied Mech's 1	3	Applied Mech's 2	3

SENIOR YEAR.

REQUIRED.

Ethics (i 1)	2	Evid. Christianity (i 2)	1
		Political Econ. (v 2)*	2

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 12 or 13 exercises.		Student takes 13 or 14 exercises.	
Public Law (v 3)	2	Constit. Law (v 4)	2
Art (vi 1)	2	Art (vi 2)	2
Old English (xi 7)	2	American Lit. (xi 12)	2
		Applied Chem. 8	4

* Not taken in 1894–95.

Theism (I 7)	2
Pract. Physics (XX 7)	2
Spanish (XVII 1)	2
Geometry (XVIII 11)	2
Mamm. Anat. (XXIV 13)	2
Art (VI 3)	2
Astronomy (XIX 3)	2
Gothic (XI 13)	2
Hig. Pl. Cur. (XVIII 15)	2
Osteology (XXIV 9)	2
Graphics 9	2
Hist. of Philos. (II 8)	2
German 9	2
Bible	2
Adv. Exp. Psych. (II 17)	2
Theor. of Func. (XVIII 17)	2
Str. of Materials 8	3
Metaphysics (II 13)	2
Physics (XX 9)	2
Geology (XXIII 3)	2
Finance (V 9)	2
Diff. Equations (XVIII 9)	2
Physiology (XXIV 11)	2
Art (VI 5)	2
Advanced Logic (II 9)	2
Italian (XVI 3)	2
Italian (XVI 1)	2
Phys. Psychology (II 15)	2
Mineralogy 17	1
Str. of Materials 8	3
English Lit. (XI 9)	2
French 7	2
Adv. Gen. Psych. (II 19)	2
Pract. Astron. (XIX 5)	2
Poetics (XII 9)	2

Theism (I 8)	2
Pract. Physics (XX 8)	2
Spanish (XVII 2)	2
Applied Mech's 8	4
Geometry (XVIII 12)	2
Histology (XXIV 10)	2
Middle English (XI 8)	2
Art (VI 6)	2
Applied Chem. 12	1
Outlines of Philos. (II 14)	2
Applied Mech's 8	4
Embryology (XXIV 12)	2
Hig. Pl. Cur. (XVIII 16)	2
Palæontology (XXIV 14)	4
Graphics 10	2
Hist. of Philos. (II 10)	2
German 10	2
Bible	2
Adv. Exp. Psych. (II 18)	2
Theor. of Func. (XVIII 18)	2
Italian (XVI 4)	2
Old Norse (XIV 12)	2
Anal. Mech's (XX 6)	2
Geology (XXIII 4)	2
Hist. Polit. Econ. (V 10)	2
Diff. Equations (XVIII 10)	2
Physical Geog. (XXII 2)	2
Art (VI 4)	2
Advanced Logic (II 10)	2
Science and Relig. (I 4)	2
Italian (XVI 2)	2
Histology (XXIV 8)	2
Physics (XX 4)	2
English Lit. (XI 10)	2
French 8	2
Palæontology (XXIV 14)	4
Adv. Gen. Psych. (II 20)	2
Pract. Astron. (XIX 6)	2
Prose Fiction (XII 10)	2

COURSE IN CHEMISTRY (*a*, *c*).

The studies of the Freshman and Sophomore years are the same as those in the course in General Science.

JUNIOR YEAR.

First Term.		*Second Term*	
Physics (XX 5)	4	Physics (XX 6)	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3
German 7	2	German 8	2
Applied Chem. 3, 5, 7	6	Applied Chem. 4	5

SENIOR YEAR.

Ethics (I 1)	2	Evid. Christianity (I 2)	1
German 9	2	German 10	2
Theor. Chemistry (XXI 3)	2		
Applied Chem. 9, 11, 17	8	Ap. Chem. 8, 10, 12, 14	11
Elective (from list open to Seniors in General Science course)	2	Elective (from list open to Seniors in General Science course)	2

COURSE IN CIVIL ENGINEERING (*e*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 3, 5	5	Mathematics 2, 4, 6	5
German 1 or French 1	3	German 2	2
		French 2	2
Graphics 1	4	Graphics 2	1½
General Chemistry 1	2	General Chemistry 2	2
English (XI 1)	2	English (XI 2)	2
		Geodesy 2	1½

SOPHOMORE YEAR.

Mathematics 7	4	Mathematics 10	5
German 3	2	German 6	2
French 3	2	French 4	2
Geodesy* 3	5	Geodesy 4	6
Mineralogy 5	3	Graphics 6	1

* For 1894–95, two exercises of Geodesy 3 are replaced by English.

JUNIOR YEAR.

Physics (XX 5)	4	Physics (XX 6)	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Mechanics 1	3	Mechanics 2	3
Geodesy 5	4	Geodesy 6	5
Graphics 7	3	Graphics 8	2

SENIOR YEAR.

Astronomy (XIX 5)	2	Evid. Christianity (I 2)	1
Mechanics 8, 5	10	Mechanics 6, 8	7
Constructions 1	2	Constructions 2, 4, 6	6
Graphics 9	2	Graphics 10	2

SCHOOL OF SCIENCE FRESHMAN FIRST TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Graphics *a*	Graphics *e*	German *a* Graphics *e* 1	German *a* 1 Graphics *e* 1 Algebra *e* 2	English *a* German *e* 1	Graphics *a* German *e* 1
9	Chemistry *e*	Chemistry *a*	French *a* 2	French *a* 2	French *e* 2	French *e* 2
10		English *e*	Algebra *a* 1	Algebra *a* 1 Graphics *e* 2	Trig. *a* 1 Graphics *e* 1	Trig. *a* 1 Graphics *e* 2
11	Chemistry *a* English *e*	English *a* Chemistry *e*	Algebra *a* 2 Trig. *e* 2	Algebra *a* 2 Trig. *e* 1	Trig. *a* 2 Trig. *e* 2	Trig. *a* 2 Trig. *e* 1
3		Graphics *a*			Graphics *e* 2	
4	Geometry *a* 1 German *e* 1	Geometry *e* 1		German *a* 1 Algebra *e* 1	German *a* 1 Algebra *e* 1	
5	Geometry *a* 2 French *e* 2	Geometry *e* 2		French *a* 2 Algebra *e* 2	French *a* 2	

SCHOOL OF SCIENCE FRESHMAN SECOND TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Graphics† *a* Anatomy* *a*	Graphics† *a* Anatomy* *a*	German *a* 1 Algebra *e* 2 Trig. *e* 1	German *a* 1 Algebra *e* 1 Trig. *e* 2	Trig. *a* 1 German *e* 1	Trig. *a* 2 English *e* 1
9	Anatomy* *a* Chemistry *e*	Chemistry *e*	German *a* 2	German *a* 2	Trig. *a* 2 German *e* 2	Trig. *a* 1 English *e* 2
10	English *e* 1	German *e* 1	Algebra *a* 1 Graphics† *e* 1 Geodesy* *e* 1	Algebra *a* 1 Graphics† *e* 2 Geodesy* *e* 2	Graphics† *e* 2 Geodesy* *e* 2	Graphics† *e* 1 Geodesy* *e* 1
11	Chemistry *a* English *e* 2	Chemistry *a* German *e* 2	Algebra *a* 2 Trig. *e* 2	Algebra *a* 2 Trig. *e* 1	Trig. *a* 1 Trig. *e* 1	Trig. *a* 2 Trig. *e* 2
3	Graphics† *a* 1	Graphics† *a* 2 Anatomy* *a*		Graphics† *e* 1 Geodesy* *e* 1	Graphics† *e* 2 Geodesy* *e* 2	
4	French *e* 1	French *e* 1		French *a* 1 Algebra *e* 2	French *a* 1 Algebra *e* 1	
5	English *a* French *e* 2	English *a* French *e* 2		French *a* 2	French *a* 2	

†During first half of the term. *During second half of the term.

SCHOOL OF SCIENCE SOPHOMORE FIRST TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 1 French *e* 1	French *a* 1 French *e* 1	English *a* Mineral. *e* 1 Geodesy *e* 2	English *a* Mineral. *e* 2 Geodesy *e* 1	Math. *a* 1 Geodesy *e* 1 Mineral. *e* 2	Math. *a* 1 Geodesy *e* 1 Mineral. *e* 2
9	French *a* 2 French *e* 2	French *a* 2 French *e* 2			Math. *a* 2	Math. *a* 2
10	An. Chem. *a* 1 Mineral. *a* 2 Math. *e* 1	An. Chem. *a* 1 Mineral. *a* 2 Math. *e* 1	German *a* 1 Math. *e* 1	German *a* 1 Math. *e* 1	An. Chem. *a* 1 Mineral. *a* 2 German *e* 1	An. Chem. *a* 1 Mineral. *a* 2 German *e* 1
11	Math. *e* 2	Math. *e* 2	German *a* 2 Math. *e* 2	German *a* 2 Math. *e* 2	German *e* 2	German *e* 2
3				Mineral. *e* 1 Geodesy *e* 2	Mineral. *e* 1 Geodesy *e* 2	
4	English *a*	German *a* 1		Math. *a* 1	Math. *a* 1	
5	English *e*	German *a* 2 English *e*		Math. *a* 2	Math. *a* 2	

SCHOOL OF SCIENCE SOPHOMORE SECOND TERM SCHEDULE—1894–95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 1 French *e* 1	French *a* 1 Graphics *e*	Zoology *a* Geodesy *e*	Zoology *a* Geodesy *e*	Math. *a* 1 Math. *e* 1	Math. *a* 1 French *e* 1
9	French *a* 2 French *e* 2	French *a* 2			Math. *a* 2 Math. *e* 2	Math. *a* 2 French *e* 2
10	Mineral. *a* 1 An. Chem. *a* 2 Math. *e* 1	Mineral. *a* 1 An. Chem. *a* 2 Math. *e* 1	German *a* 1 Math. *e* 1	German *a* 1 Math. *e* 1	Mineral. *a* 1 An. Chem. *a* 2 Geodesy *e*	Mineral. *a* 1 An. Chem. *a* 2 Geodesy *e*
11	Math. *e* 2	Math. *e* 2	German *a* 2 Math. *e* 2	German *a* 2 Math. *e* 2		
3	Zoology *a* Geodesy *e*	Geodesy *e*				
4		German *a* 1		Math. *a* 1 German *e* 1	Math. *a* 1 German *e* 1	
5		German *a* 2		Math. *a* 2 German *e* 2	Math. *a* 2 German *e* 2	

SCHOOL OF SCIENCE JUNIOR FIRST TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 5 *g* Surveying *g*	English Lit. 5 *g* Surveying *g*	Italian 1 *g*	Italian 1 *g*
9	Astronomy *a,e*	Astronomy *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*
10	Public Law *g* Art 1 *g* Old English *g* Graphics *g,e* Ap. Chem. 8 *c*	Public Law *g* Art 1 *g* Old English *g* Graphics *g,e* Ap. Chem. 8 *c*	Ancient Hist. *g* Bible *g* Graphics *g,e* Ap. Chem. 5 *c*	Ancient Hist. *g* Bible *g* Ap. Mechs. 1 *e* Ap. Chem. 5 *c*	French *g* Ap. Mechs. 1 *g*	French *g* Ap. Mechs. *g*
11	Spanish 1 *g*	Spanish 1 *g*	Theor. Chem. 3 *g*	Theor. Chem. 3 *g* Ap. Mechs. 1 *g*	Psychology *a* Ap. Mechs. 1 *e*	History 3 *g* Ap. Mechs. 1 *e*
8	Geometry 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*	Geometry 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*		Biology 3 *g* Diff. Equations *g* Geodesy *e*	Biology 3 *g* Diff. Equations *g* History 3 *g* Geodesy *e*	
4				German *g,c*	German *g,c*	
5	Psychology *a*			Geology 3 *g*	Geology 3 *g*	

SCHOOL OF SCIENCE JUNIOR SECOND TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 6 *g*	English Lit. 6 *g*	Physics 4 *g* Italian 2 *g* Histology 8 *g* Geodesy *e*	Physics 4 *g* Italian 2 *g* Histology 8 *g* Geodesy *e*
9	Geology 2 *a,e*	Geology 2 *a,e*	Physics *a,e*	Physics *a,e*	Ap. Chem. 4 *c*	Logic *a*
10	Constit. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Constit. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Med. History *g* Bible *g* Ap. Chem. 4 *c* Geodesy *e*	Med. History *g* Bible *g* Ap. Chem. 4 *c* Ap. Mechs. 2 *e*	French *g* Ap. Mechs. 2 *g*	French *g* Ap. Mechs. 2 *g*
11	Spanish 2 *g*	Spanish 2 *g*	Pract. Bot. 4 *g*	Pract. Bot. 4 *g* Ap. Mechs. 2 *g*	Logic *a* Ap. Mechs. 2 *e*	Logic *a* Ap. Mechs. 2 *e*
3	Geometry 12 *g* Mid. English *g* Vert. Anatomy *g*	Geometry 12 *g* Mid. English *g* Vert. Anatomy *g*		Ex. Psy. (2 p.m.) *g* Diff. Equations *g* Geodesy *e*	Ex. Psy. (2 p.m.) *g* Diff. Equations *g* Geodesy *e*	
4				German *g,c*	German *g,c*	
5	Physics *a,e*	Physics *a,e*		Geology 4 *g* Anal. Mechs. *g*	Geology 4 *g* Anal. Mechs. *g*	

SCHOOL OF SCIENCE SENIOR FIRST TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		Gothic *g* H. P. Curves *g* Osteology *g*	Gothic *g* H. P. Curves *g* Osteology *g* Graphics *g,e*	Physiology *g* Graphics *g,e*	Phys. Psych. *g* Italian 1 *g* Ap. Chem. 11 *c* Str. Mats. *g,e*	Phys. Psych. *g* Italian 1 *g* Mineralogy 17 *g,c* Str. Mats. *g,e*
9	R. & Bridges *e*	R. & Bridges *e*	Hist. of Phil. *g* German *g,c*	Hist. of Phil. *g* German *g,c*	Eng. Lit. 9 *g* French *g*	Eng. Lit. 9 *g* French *g*
10	Old English *g* Public Law *g* Art 1 *g* Ap. Chem. 9 *c*	Old English *g* Public Law *g* Art 1 *g* Ap. Chem. 9 *c*	Bible *g*	Bible *g*		
11	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Adv. Ex. Psy. *g* Theor. of Fns. *g* Str. Mats. *g,e* Theor. Chem. *c*	Adv. Ex. Psy. *g* Theor. of Fns. *g* R. & Bridges *e* Theor. Chem. *c*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych *g*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych. *g*
3	Geometry 11 *g* Mamm. Anat. *g* Ap. Chem. 9 *c*	Geometry 11 *g* Mamm. Anat. *g* Ap. Chem. 9 *c*		Finance *g* Physiology *g* Diff. Equations *g* Ap. Chem. 9 *c*	Finance *g* Diff. Equations *g* Ap. Chem. 9 *c*	
4	Art 5 *g* Astronomy 3 *g* R. & Bridges *e*	Art 5 *g* Astronomy 3 *g* R. & Bridges *e*		Art 3 *g* Adv. Logic *g* Italian 3 *g* Constructions 1 *e*	Art 3 *g* Adv. Logic *g* Italian 3 *g* Constructions 1 *e*	
5	Ethics *a*	Ethics *a*		Metaphysics *g* Physics 9 *g* Geology 3 *g*	Metaphysics *g* Physics 9 *g* Geology 3 *g*	

SCHOOL OF SCIENCE SENIOR SECOND TERM SCHEDULE—1894-95.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Embryology *g* Ap. Chem. 10 *c*	Embryology *g* High. P. Curves *g*	High. P. Curves *g* Palæontology *g* Graphics *g,e*	Palæontology *g* Graphics *g,e*	Eng. Lit. 10 *g* Physics 4 *g* Histology 8 *g* Italian 2 *g* Ap. Chem. 14 *c* Stab. Structs. *e*	Engl. Lit. 10 *g* Physics 4 *g* Histology 8 *g* Italian 2 *g* Ap. Chem. 14 *c* Stab. Structs. *e*
9	Drainage *e*	Ev. of Chr. *a,e*	Hist. of Phil. *g* German *g,c*	Hist. of Phil. *g* German *g,c*	Palæontology *g* French *g*	Palæontology *g* French *g*
10	Constit. Law *g* Art 2 *g* Amer. Lit. *g* Ap. Chem. 8 *g*	Constit. Law *g* Art 2 *g* Amer. Lit. *g* Ap. Chem. 8 *g* Ap. Chem. 10 *c*	Bible *g*	Bible *g*	Ap. Chem. 8 *g* Ap. Chem. 10 *c*	Ap. Chem. 8 *g*
11	Theism *g* Pract. Physics *g* Spanish 2 *g* Motors *g,e*	Theism *g* Pract. Physics *g* Spanish 2 *g* Motors *g,e*	Adv. Exp. Psyc. *g* Theor. of Fns. *g* Stab. Structs. *e*	Adv. Ex. Psych. *g* Theor. of Fns. *g* Drainage *e*	Adv. Gen. Psy. *g* Pract. Ast. *g* Prose Fiction *g* Roads *e*	Adv. Gen. Psy. *g* Pract. Astr. *g* Prose Fiction *g* Roads *e*
8	Geometry 12 *g* Mid. English *g* Histology 10 *g*	Geometry 12 *g* Mid. English *g* Histology 10 *g* Ap. Chem. 10 *c*		Hist. Pol. Econ. *g* Diff. Equations *g* Ap. Chem. 10 *c*	Hist. Pol. Econ. *g* Diff. Equations *g* Ap. Chem. 10 *c*	
4	Art 6 *g* Ap. Chem. 12 *g,c*	Art 6 *g*		Art 4 *g* Adv. Logic *g* Science & Relig. *g* Phys. Geog. *g* Water Works *e*	Art 4 *g* Adv. Logic *g* Science & Relig. *g* Phys. Geog. *g* Water Works *e*	
5	Outlines of Phil. *g* Motors *g,e*	Outlines of Phil. *g* Motors *g,e*		Old Norse *g* Italian 4 *g* An. Mechs. 6 *g* Geology 4 *g*	Old Norse *g* Italian 4 *g* An. Mechs. 6 *g* Geology 4 *g*	

UNIVERSITY COURSES FOR GRADUATES.

In addition to the courses open to undergraduates, there are courses of instruction open to resident graduates of this and other colleges, under the following regulations:

Every instructor in the College shall be at liberty, with the leave of the Faculty, to give instruction to graduates. He shall meet with his class for at least one hour a week, and not more than three hours a week, during the Academic year, and shall require the members of his class to undergo examinations on the course pursued.

Each graduate student attending instruction regularly, and passing the examinations, is entitled to a certificate stating what he has done, signed by the President in behalf of the College.

Students by pursuing these courses may also qualify themselves for the degrees: Master of Arts, Master of Science, Doctor of Philosophy, or Doctor of Science, according to the regulations prescribed under the heading "Degrees."

Each graduate student shall pay ten dollars, or such sum as the Faculty may require, for every course of instruction that he enters requiring an hour per week, and shall defray whatever expense may be incurred by the use of instruments and materials employed by him. This charge may be remitted in whole or in part when the circumstances of the student require it. All undergraduate courses of lectures or instruction are also open to graduate students without the payment of any fees except for material used. Charges will be made for courses in analytical chemistry, the amount to depend on the nature of the course pursued.

Every applicant for these courses should register his name and college at the Registrar's office.

Arrangements for the particular courses should be made by application to the individual instructors.

UNIVERSITY COURSES.

The following courses are classed as University courses and are such as may properly be attended by candidates for the Master's or Doctor's degree. As may be seen from the more detailed statements to which reference is made, some of these courses are open to graduates only, while others are also undergraduate electives. In many subjects other special courses may be arranged on consultation with the Professors.

MORAL PHILOSOPHY: Courses 1 to 10.

MENTAL PHILOSOPHY: Courses 3 to 31.

HISTORY AND POLITICAL SCIENCE: Courses 5 to 10.

JURISPRUDENCE AND POLITICAL ECONOMY: Courses 3 to 12.

ARCHÆOLOGY AND THE HISTORY OF ART: Courses 3 to 6.

GREEK: Courses 15 and 16.

LATIN: Courses 15 to 22.

SANSKRIT: Courses 3 and 4.

HEBREW: Courses 1 and 2.

ENGLISH: Courses 9 to 16.

ORATORY AND ÆSTHETIC CRITICISM: Courses 9 and 10.

GERMAN: Courses 9 to 12.

FRENCH: Courses 7 to 16.

ITALIAN: Courses 3 to 6.

MATHEMATICS: Courses 12 to 24.

ASTRONOMY: Courses 7 to 10.

PHYSICS: Courses 9 to 14.

PHYSICAL GEOGRAPHY: Course 4.

GEOLOGY: Courses 3 and 4.

CHEMISTRY: For statement of courses see the courses offered in the School of Science.

BIOLOGY: An advanced course in Biology has been established in connection with the Geological, Zoological, Botanical, and Chemical departments, the objects in view being: (1) to foster a spirit of original research, (2) to qualify advanced students to become teachers. This course is open to college graduates, also to students presenting diplomas from recognized medical schools.

It is not restricted to students who are candidates for a degree, if the applicants possess sufficient elementary knowledge to profit by the instruction.

This course is of a comprehensive and elastic character, and according to the requirements and wishes of different students, includes much laboratory work under the direction of the instructor. At the close of the first term, the student may select a department of special study for his thesis, which must present the results of original work.

DEGREES.

Students of the College, who have passed all their examinations and fulfilled all the prescribed conditions are ordinarily recommended by the Faculty for a degree. The degrees thus given are Bachelor of Arts (p. 33), Bachelor of Science (p. 82), Civil Engineer (p. 82) and Electrical Engineer (p. 96).

Master of Arts. (A.M.)

The degree of Master of Arts may be conferred only upon a Bachelor of Arts of an approved college who shall have devoted one year exclusively to graduate study in the College under the care of the Faculty, passing examinations upon the studies pursued; or shall have taken at least one University course each term for two years and passed satisfactory examinations upon his work; or shall have submitted to the Faculty a satisfactory dissertation, ordinarily of not less than five thousand words, on some literary, philosophical or scientific subject, not earlier than the first of April in the third year after graduation. The fee for this degree is ten dollars, to be paid to the College Treasurer either before the candidate enters his last examinations, or else when his dissertation is handed in.

Master of Science. (M.S.)

The degree of Master of Science may be conferred upon any Bachelor of Science of an approved institution who shall have devoted one year exclusively to graduate study in the College under the care of the Faculty in such of the following subjects as the Faculty shall prescribe, and who shall have shown satisfactory proficiency therein by dissertations and examinations: biology, mathematics, rational and applied mechanics, practical astronomy, applied chemistry, qualitative analysis, quantitative analysis, physics, mineralogy, graphics, modern languages.

Any Bachelor of Arts, who after examination may be found to be prepared to pursue a University course in science, may become a

candidate for the degree of Master of Science on the same conditions as a Bachelor of Science. The fee for this degree is ten dollars, to be paid to the College Treasurer before the candidate enters his last examinations.

Degree of Doctor of Philosophy (Ph.D.) in Princeton College.

Subject to the regulations hereinafter stated, the degree of Doctor of Philosophy may be conferred upon any Bachelor of Arts of Princeton College, or of any approved college whose Academic course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Arts, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

Regulations.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the College in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study. They are also examined in the group of subjects connected with the general department of their proposed studies as detailed below:

A. In the Department of Philosophy: Ability to read Latin with a fluency sufficient to ensure its use as an instrument of advanced study; general psychology and logic; history of philosophy, ancient and modern; outlines of general history.

B. In the Department of Language and Literature: Outlines of general history; general knowledge of the English language and literature; ability to read Greek and Latin with fluency sufficient to ensure their use as instruments of advanced study.

C. In one of the following six groups in the Department of Mathematics and Science:

1. In Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and the differential and integral calculus.

2. In Astronomy: Elementary mathematics, including trigonometry and analytical geometry; general astronomy; general physics.

3. In Physics: Elements of mathematics, including trigonometry and analytical geometry; general physics.

4. In Chemistry: General chemistry; general physics.

5. In Geology and Physical Geography: Elements of geology, zoology and botany: general chemistry.

6. In Biology: Elements of zoology and botany; general chemistry.

II. *Chief Subject of Study.*—Every candidate, after passing his preliminary examination and before entering on his studies for the Doctor's degree, shall announce which one of the subjects in the appended lists he selects as his chief subject, and shall thereupon present to the Committee on University Degrees and Fellowships for their approval a statement of the said chief subject to which he intends devoting himself while a candidate, with such fulness of explanation as the committee may require.

A. Department of Philosophy: Logic, psychology, ethics, metaphysics, history of philosophy, philosophy of religion, history, political economy, science of politics, jurisprudence, archæology and art.

B. Department of Language and Literature: Sanskrit, Greek, Latin, French, German, Italian, English (including Anglo-Saxon).

C. Department of Mathematics and Science: Mathematics, astronomy, physics, chemistry, geology and physical geography, biology.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. One of these must be logic, psychology, ethics, or the history of philosophy, unless the candidate has chosen for his chief subject any one of those just named or else passes a satisfactory special examination on some one of them before entering upon his course as a candidate. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction

any study enumerated in the lists of chief subjects may be taken, as well as the following which are not thus enumerated: physiological psychology, pedagogics.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted, the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on University Degrees and Fellowships. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty, and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Philosophy carries with it that of Master of Arts.

VII. *Fees.*—Those who apply for the degree shall pay to the College Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Degree of Doctor of Science (D.Sc.) in Princeton College.

Subject to the regulations hereinafter stated, the degree of Doctor of Science may be conferred upon any Bachelor of Science of Princeton College, or of any approved college or scientific school whose course is equivalent to that pursued in Princeton, provided

he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Science, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the College in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study and research.

They are also examined in the particular group of subjects connected with the subject of their proposed studies, as detailed below:

1. Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and of the differential and integral calculus.

2. Astronomy: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general astronomy, general physics.

3. Physics: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general physics, general chemistry.

4. Chemistry: General chemistry, general physics.

5. Mineralogy: Elements (including crystallography), general chemistry, general physics.

6. Geology and Physical Geography: Elements of geology, zoology and botany, general chemistry.

7. Biology: Elements of zoology and botany, general chemistry.

II. *Chief Subject of Study.*—After passing the preliminary examination every candidate shall announce which of the following departments he selects for his chief subject of study:

1. Mathematics: Including higher differential and integral calculus; differential equations; geometry (conics, higher plane curves, geometry of three dimensions); theory of functions, elliptic

functions, analytical mechanics. In the final examination the candidate will also be tested with reference to his ability to make a computation with reasonable skill and accuracy. This will be necessary only where the candidate has had no satisfactory laboratory or observatory work.

2. Astronomy: Including either practical astronomy and theory of observations, or computation of orbits and ephemerides.

3. Physics.

4. Chemistry. A portion of the time will be required for the study of qualitative and quantitative chemistry, unless the candidate is already sufficiently proficient in these branches.

5. Mineralogy.

6. Geology and Physical Geography: Including either practical and engineering geology, with field work, or application of palæontology to determinations of formations, or physical geography.

7. Biology: Including the morphology, histology and embryology of some one class of animals or plants; physiology; histological methods and practice; animal embryology; modes of reproduction of plants.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length, and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on University Degrees and Fellowships. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty and cannot be

divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Science carries with it that of Master of Science.

VII. *Fees.*—Those who apply for the degree shall pay the College Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Bachelor of Divinity. (B.D.)

This degree may be conferred upon a Bachelor of Arts of any approved college who shall also have completed a three years' course of theological study in any approved institution, followed by a two years' course of prescribed study in theology. This special course of study shall be prescribed, and all examinations required shall be conducted by examiners designated by the Board of Trustees.

The regulations as to preliminary examinations, chief and subsidiary subjects of study, thesis and final examination are similar to those pertaining to the doctorates, except that only one subsidiary subject is required. Residence in Princeton is not necessary for obtaining the degree.

The fees are the same as those paid by candidates for the Doctor's degree.

UNIVERSITY FELLOWSHIPS.

These fellowships were founded by subscription and endowment and were intended by the founders to encourage study and promote original research in the several departments to which they are assigned. They are distinguished from the college fellowships by being open to the graduates of any American college, while the appointments are made, not by competitive examination, but by a comparison of the records presented by the applicants as to their previous collegiate standing, capacity and character.

The University Fellowships are subject to the following regulations:

1. The Fellowships are to be held for one year, but in cases of special merit they may be continued for a longer period, by recommendation of the department and sanction of the Faculty.

2. The candidates shall be graduates of not more than five years' standing of an accredited American college. An application should be accompanied with evidence of the qualifications of the applicant to pursue an independent course of study and investigation in the department concerned.

3. Appointment shall be made by the Faculty upon recommendation of the professors in the department interested, and shall be announced at Commencement.

4. All applications must be in the hands of the Registrar of the College on or before May 15th, the appointees to hold their positions for a year from the following September.

It is deemed essential to the development of the University department that the number of these fellowships should be largely increased. The following have already been founded:

THE SOUTH EAST CLUB UNIVERSITY FELLOWSHIP IN SOCIAL SCIENCE.

This fellowship, which pays to the holder $500 per annum, was founded by alumni of the classes of '76, '77, '78 and '79—former residents of the South Entry of East College.

THE CLASS OF 1877 UNIVERSITY FELLOWSHIP IN BIOLOGY.

This fellowship pays to the holder $400 per annum.

THE UNIVERSITY FELLOWSHIP IN ENGLISH.

THE UNIVERSITY FELLOWSHIP IN ARCHÆOLOGY.

This fellowship pays to the holder $400 per annum.

COLLEGE FELLOWSHIPS, COMPETITIVE SCHOLARSHIPS AND PRIZES.

Besides the degrees and honors conferred in the regular course, annual fellowships, competitive scholarships and prizes are offered as special incentives to study, in the classes or departments with which they are connected.

Only matriculated students who are candidates for a degree are admitted to the competitition for these fellowships, prizes and scholarships, and no one is admitted to such competition who has failed to pass satisfactorily his last preceding examination in any of the departments.

No member of any class is allowed to compete for more than one of the fellowships or scholarships offered to that class.

The names of the college fellows, scholars and prizemen of each year are included in the Honor List for the year.

The funds for the college fellowships, prizes and competitive scholarships are special gifts, and the income is appropriated according to the specific instructions of the donor. They do not belong to the general funds of the college. If, therefore, there be default in the interest on the securities in which these funds are invested, the College assumes no pecuniary responsibility in the matter.

FELLOWSHIPS.

Every competitor must have been a member of the College in full standing for at least two academic years previous to the fellowship examinations.

No student whose final rank for scholarship is below the second general group can be a competitor for any fellowship; and no student can be a competitor for the fellowship in any particular department whose average rank for the last two years of his course is below the first group in that department.

Every Fellow obtaining one of the competitive fellowships the income of which is over $400 must devote his whole time for one year to study in the department for which the fellowship is provided, under the direction of the Professors in that department. He must reside in Princeton, and pass two rigid examinations on his work, unless by a vote of the Faculty he be allowed to study at an approved foreign university, in which case he shall from time to time furnish written reports of his work to the Professors in his department. The result of every examination and the reports of work done abroad shall be immediately reported to the Faculty. Any Fellow resident in Princeton shall, when called upon, perform such duties in the department to which he belongs as may be assigned to him by the President at the request of the Professors in that department. Any Fellow may be allowed to occupy free of cost in one of the College buildings a room assigned to him by the College authorities, and while occupying such room he shall be regarded as a resident officer of the College, and shall perform such duties in preserving order and decorum in the College edifices as the President and Dean may assign.

THE CHANCELLOR GREEN MENTAL SCIENCE FELLOWSHIP.

This fellowship, originally founded in 1870 upon the annual payment of $600 by the late Chancellor Henry W. Green, was permanently endowed in 1878 by a gift of $10,000 by his widow.

The income of this fund, at the current rate of interest, to be paid quarterly, will be awarded to that member of the Senior Class who shall write the best essay on modern theories of space-perception and their bearing on a priori truth, (to be given in on or before June 1), and who shall stand highest at a special examination to be held in June.

The examination will be founded on the philosophies of Plato, Aristotle, Descartes, Locke, Leibnitz, Hume, Reid and Kant; also theoretical ethics, metaphysics, psychology and inductive logic.

THE CLASSICAL FELLOWSHIP.

The classical fellowship has been, for a time, without funds. The sum of $600, payable quarterly, was previously awarded to the successful competitor. A portion of that sum will be awarded to

that member of the Senior Class who shall stand highest at a special examination to be held in June, 1895, on the following subjects:

In Greek.

Translation from English into Greek. Translation of prose Greek at sight. The *Alcestis* of Euripides, Aristophanes's *Frogs*, Plato's *Charmides* and *Lysis*. The philosophy of Plato.

In Latin.

Translation from English into Latin. Translation of Latin at sight. Cicero *de Finibus*, and the relations of Roman philosophy to Roman religion as specially exhibited in the works of Cicero and Lucretius. History of Latin literature.

THE CLASS OF 1860 EXPERIMENTAL SCIENCE FELLOWSHIP.

This fellowship was founded in 1870 upon the sum of $10,000 subscribed by the Class of 1860. A deficiency of income, resulting from the depreciation of the value of the securities in which the principal was invested and the lowering of the rate of interest, is paid, by the consent of the donor, from the income of the Magee Professorship of Mining and Engineering, founded by George J. Magee, Esq., of the Class of 1860.

The sum of $600, to be paid quarterly, will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects, viz: 1. Theory of heat. 2. (a) Palæontology of the reptiles and birds. (b) Geology of the Mesozoic Era. 3. Outlines of theoretical chemistry.

THE J. S. K. MATHEMATICAL FELLOWSHIP.

The J. S. K. Fellowship was founded in 1873 upon the sum of $11,000 given by a gentleman in New York City, three-fourths of the income of which is devoted to this fellowship, and one-fourth to the Freshman First Honor prize.

This fellowship will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects: Geometry; the calculus; the elements of the theory of functions.

THE BOUDINOT FELLOWSHIPS.

These fellowships are founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey.

THE HISTORICAL FELLOWSHIP.—The sum of $200 per annum, to be paid quarterly, will be given to the holder of the Fellowship, who shall be appointed by the Faculty, upon the nomination of the President and the Professor or Professors of History, for any period not exceeding three years, on condition that he reside in Princeton and devote his whole time to historical research; that he deliver such lectures and conduct such exercises as the President and the Professor or Professors of History shall direct, and that he perform such other duties as may be assigned him in accordance with the general regulations respecting the duties of resident Fellows.

THE MODERN LANGUAGE FELLOWSHIP.—The sum of $200, to be paid quarterly, will be awarded to that member of the Senior class who shall pass the best examination in June, on the following subjects:

In German—Translation from English into German; the reading at sight of German prose, scientific as well as literary; history of German literature; critical study of Lessing's Laocoon, Schiller's Jungfrau von Orleans, Goethe's Hermann und Dorothea and Faust. In French—Translation at sight of English into French; Brachet's Grammaire française; Demogeot's Histoire de la Littérature française; a critical knowledge of Molière's Tartuffe and Les Précieusés ridicules, Pascal's Pensées, premiére partie, Beaumarchais's Le Mariage de Figaro, Balzac's Eugénie Grandet. An essay of not less than four pages (foolscap) in either French or German.

The Fellow shall from time to time during the following year, as may be required by the Professors of Modern Languages, give evidence by papers that he is reading such a course as the Professors may approve.

THE E. M. BIOLOGICAL FELLOWSHIP.

The Biological fellowship will be awarded to that student who shall stand highest at a competitive examination on subjects assigned by the Professors of the Biological department.

The competition for this fellowship will be open to any member of the Senior class in either the Academic or Scientific department, or to any college graduate who shall have pursued during the pre-

ceding year, the university course in Biology at Princeton, and who shall, in the opinion of the examiners, be deemed competent to pursue the subject advantageously.

This fellowship conveys the use of a table in the National Seaside Laboratory at Woods Holl, Mass., together with all the facilities afforded for the collection and study of animal life during the season favorable for such investigations. In the winter months following this laboratory work the Fellow will pursue his studies at Princeton, and will be required to prepare and submit a thesis embodying the results of his summer researches.

The examinations for this fellowship in 1895 will be held in June upon the following subjects:

1. Life-history of higher cryptogams and gymnosperms.
2. Anatomy and embryology of mollusca.
3. Anatomy and embryology of the teleosts and selachians.
4. The histology of the nervous system.

PRIZES AND COMPETITIVE SCHOLARSHIPS.

ALEXANDER GUTHRIE M'COSH PRIZE.

The interest of $1,500 will be given annually to that member of the Senior class who shall pass the best examination and write the best essay in philosophy, including psychology, logic, metaphysics and the history of philosophy. The subject of the essay will be: The prevailing types of philosophy; can they reach reality logically? It must be handed in on or before June 1, 1895.

THE LYNDE PRIZES.

Three prizes—the income of $5,000, contributed by Charles R. Lynde, Esq.,—will be awarded by a committee appointed by the Faculty, to the three successful competitors in a debate on the Tuesday evening preceding Commencement. The competitors are six members of the Senior class—representatives of the Literary Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE BAIRD PRIZES.

Through the liberality of Charles O. Baird, Esq., the following prizes, representing the income of $6,000, will be given to

those who excel in the oratorical exercises of the Senior class, viz: The Baird prize of $100, to the best speaker of those who have ranked among the first six writers in any two of the three departments of English Literature, Rhetoric and Oratory; a prize for oratory, of $50, to the best speaker, exclusive of the Baird Prizeman, of those who, in the same departments, have ranked among the first twelve writers; a prize for delivery, of $30, to the best speaker exclusive of the two just mentioned; also, a prize for poetry of $50; and two prizes of $40 and $30, respectively, for the best and the second best written disputations.

THE CLASS OF 1859 PRIZE.

The interest of $2,000 given by the Class of 1859, will be awarded to that member of the Senior class who shall write the best essay on Sir Henry Taylor as a dramatist and pass the best examination on Shakespeare's Cymbeline. The essay must be handed in on or before June 1, and the examination will be held in June. The subject for the essay for the Class of 1896 will be The Literary Work of Oliver Wendell Holmes.

THE GEORGE POTTS BIBLE PRIZES.

The yearly interest of $1,000, given in 1867 by Mrs. Sarah A. Brown, expended in the purchase of two copies of Matthew Henry's Commentary on the Bible, will be presented to the two best Biblical scholars of the Senior class at the end of their College course.

THE LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.

This prize, being the annual interest on the sum of $1,000, contributed by the class of 1883, was instituted as a memorial of Rev. Lyman H. Atwater, D.D., LL.D., Professor of Political Science. It will be given to that member of the Senior class who shall be adjudged by the Professors of Political and Social Science to have passed the best examination and written the best essay. The subject for the examination in 1895 will be: The Contract Theory of the State in all its forms. The subject for the essay will be: Rousseau and the French Revolution. The essay must be ready June 1, 1895; the examination will be held on that day.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

Mrs. Norman White has established in memory of her son, Frederick Barnard White of the Class of 1883, a prize in architecture, yielding $50 each year. It is open to the entire Junior and Senior classes and to Special students who take a full schedule of studies. It will be given for the best essay and examination. The subject of the essay for this year is: The origin of Roman architecture. The subject of the examination will be Roman architecture. The essay should be presented before June 1, 1895.

THE THEODORE CUYLER PRIZE IN ECONOMICS.

The interest of $1,000, presented by Mr. C. C. Cuyler, of the Class of 1879, will be given to that member of the Senior class who shall present the best thesis and pass the best examination in June on some subject in Political Economy, to be assigned by the Professor in charge of the Department of Political Economy. The subject for the thesis of 1895 will be: Bi-metallism, and the examination will cover the utility theory of value.

CLASS OF 1869 PRIZE IN ETHICS.

The annual interest of $3,000, given by the Class of 1869, will be awarded to that member of the Senior class who shall pass the best examination in Ethics and write the best essay. The essay to be presented on or before June 1, 1895. The subject of the essay for the Class of 1895 will be: A criticism of the Ethics of Evolution.

THE C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

A prize of fifty dollars, the gift of Mr. Adrian H. Joline of the Class of 1870, will be awarded to that member of the Senior class who, at the close of the college year, shall pass the best examination in the political history of the United States during the period 1787 to 1820, and present the best thesis on a topic pertaining to that period, to be assigned by the Professor of History.

THE NEW YORK HERALD PRIZE.

The yearly interest of one thousand dollars, presented by Mr. James Gordon Bennett, will be given to the member of the Senior

class or to the Special Student of satisfactory standing who shall have taken the prescribed course in Political Science and English Literature, and who shall have prepared the best essay in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States Government.

THE WOOD SCHOLARSHIP.

The sum of $150, the income of a legacy of Dr. George B. Wood, will be awarded to that member of the Junior class who shall stand highest for the Junior year.

JUNIOR ORATOR MEDALS.

Four gold medals, or books of equal value, will be awarded by a committee appointed by the Board of Trustees, to the four successful competitors in an oratorical contest on the Monday evening before Commencement. The competitors are eight members of the Junior class—four from the Cliosophic and four from the American Whig Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE MACLEAN PRIZE.

The Maclean prize, founded by the will of the late Henry A. Stinnecke, consisting of the sum of $100, will be given to that one of the orators chosen by the Literary Societies from the Junior class, who shall on the Monday evening before Commencement pronounce the best English oration.

The committee of judges will be composed of the Professor of Rhetoric and two graduates of the College appointed by the Board of Trustees.

DICKINSON PRIZE.

The Dickinson prize, founded by John Dickinson, Esq., of New Jersey, in 1782, consisting of a medal of the value of $60 (or its equivalent in money), will be awarded to that member of the Junior class who shall write the best dissertation upon a theme in Logic. The dissertation to be presented on or before June 1, 1895. The subject of the dissertation may be learned by applying to the Professor of Mental Science and Logic.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.

This prize is to be given annually by the class of 1876 to the successful contestant in a debate on a subject of current interest in American politics, to be held on Washington's Birthday, said prize to be the interest of $1,000. The competitors, four in number, one from each class, are to be chosen by a vote of the respective classes.

THE CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Of the yearly interest of $1,500, one-half will be given to the best Old English scholar, and one-half to the best English Literature scholar of the Junior Academic Class.

THE THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Junior Academic Class who shall pass the best examination in Chaucerian and Elizabethan English, and write the best thesis on some assigned topic in English philology.

THE STINNECKE SCHOLARSHIP.

The Stinnecke Foundation was established in 1870 by the will of the late Henry A. Stinnecke, of the Class of 1861, and was supplemented by a bequest received in 1876 from his aunt, Miss Maria Stinnecke. The income is divided between the Stinnecke scholarship of $500 and the Maclean prize of $100.

The Stinnecke scholarship, of the annual value of $500, tenable during the College course, unless forfeited by neglect of study, "will be given to that person who, having entered the Sophomore class, shall pass the best examination at the opening of the session in September, 1896, in the Odes of Horace, the Eclogues of Virgil, and the Latin Grammar and Prosody, as well as the Anabasis or Cyropædia of Xenophon and the Greek Grammar." Students of the College who have been members of the Freshman class, as well as new students entering the Sophomore class, will be admitted to such examination. The committee of examiners is appointed by the Board of Trustees.

THE CLASS OF 1861 PRIZE.

The interest of $1,200, given by the Class of 1861, will be awarded to that member of the Sophomore class who shall pass the best examination at the end of the year on Mathematics 2, 5, 6, 7, 8.

THE FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

This prize, the yearly interest of $500, will be given to that member of the Sophomore class, not below the fourth group in his English studies, who in the judgment of a committee appointed by the Faculty, shall write the best English essay of the year.

THE CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Sophomore Academic class who, at the close of the Sophomore year, shall pass the best examination on the English studies of the year.

THE FRESHMAN FIRST HONOR PRIZE.

A prize of $200, part of the income of the J. S. K. Fund, to be paid in quarterly installments during the following year, will be awarded to that member of the Freshman class who, having entered said class at the beginning of the College year, shall, at the end of the year, be reported to the Trustees by the Faculty as having attained the "highest average grade" in scholarship, provided he pursue his studies in this College and maintain a good standing during the Sophomore year. No student who has been suspended from College, or who has been put upon his last probation, shall be eligible to this prize.

SOCIETIES.

Literary Societies.

The Cliosophic and American Whig Societies originated early in the history of the College. They are conducted by the undergraduates, but also include in their organization graduates and officers of the College. Both possess valuable libraries of over 10,000 volumes each. The old halls in which they were accustomed to meet, becoming too small for their accommodation, have been removed, and new and more commodious buildings have been erected near the old sites. They both pursue courses of literary exercises, award numerous prizes for orations, essays and debates, and grant diplomas to their respective graduates.

A generous competition for College honors has always prevailed between them. On the evening before Commencement representatives of the Societies from the Senior class engage in a public debate —on the preceding evening representatives from the Junior class engage in a competition in oratory. The details respecting the Lynde debate and Junior orations will be found on pp. 126, 129.

The Philadelphian Society.

The Philadelphian Society is an association of undergraduates for the promotion of the religious interests of the College, particularly of the members of the Society. It was founded in 1825. Devotional meetings, usually conducted by members of the Faculty, are held on Thursday evenings, business meetings on Saturday evenings. Murray Hall, the building belonging to the Society, was erected from a bequest left for the purpose by Hamilton Murray of the class of 1872. It contains a hall for public worship and a reading room supplied with religious books and periodicals.

The St. Paul's Society.

The St. Paul's Society, which was founded in 1875, is an association similar in nature and aim to the Philadelphian, and is intended to be helpful, devotionally and practically, to those students in the College who have been accustomed to the worship of the Protestant Episcopal Church. It has weekly meetings, conducted by the students, and ordinarily a course of sermons is delivered annually in Trinity Church under its auspices. The weekly devotional meeting is held on Sunday evening at seven o'clock, and its business meetings on the third Wednesday of November, and the fourth Wednesday of April.

BUILDINGS, LABORATORIES, COLLECTIONS.

The College buildings are situated in an elevated and conspicuous portion of the campus, which consists of about two hundred and twenty-five acres. The oldest, and in many respects the most interesting of the buildings, is Nassau Hall, which dates back nearly to the foundation of the College, having been erected in 1756. A portion of the west wing is still occupied by students, the remainder being devoted to the histological laboratory, the laboratory of experimental psychology and the offices of the Curator of the E. M. Museum and of instructors in the department of biology. The central and eastern portions contain the geological museums and lecture room, and the palæontological laboratory. The School of Science building, the Chancellor Green Library, Dickinson Hall, Murray Hall, and a number of other buildings, including the majority of the dormitories, have been erected since 1870. The Marquand Chapel, the gift of Henry G. Marquand, Esq., of New York, was built in 1882. The Academic lectures and recitations are conducted mainly in Dickinson Hall and in the east end of Nassau Hall, while the Scientific lecture rooms and laboratories are at present principally in the building of the John C. Green School of Science and in the Biological laboratory presented by the class of 1877. The Museum of Historic Art, the central part of which has been completed, will contain the lecture rooms for the courses in Art and Archæology. The special instruction in the department of Electrical Engineering is carried on mainly in the Magnetic Observatory, and the new Chemical Laboratory provides the class rooms and laboratories of the departments of Chemistry and Mineralogy. Two new dormitories, the Albert B. Dod Hall, and the David Brown Hall, both gifts of Mrs. David Brown, of Princeton, have been recently erected. Other new

buildings are the Dynamo building of the School of Electrical Engineering and the Halls of the American Whig and the Cliosophic Literary Societies. Alexander Hall is a handsome building, lately finished, the generous gift of Mrs. Charles B. Alexander, to be used for Commencement exercises and all academic gatherings. The Isabella McCosh Infirmary has been completed and is now open. The Brokaw Memorial Building, in connection with the Brokaw Field, is being constructed. This building is the gift of Mr. I. V. Brokaw, in memory of his son, Frederick Brokaw. The students —except by special permission of the Faculty—reside in the College dormitories, the west wing of Nassau Hall, East College, West College, Reunion Hall, Witherspoon Hall, Edwards Hall, University Hall, Albert B. Dod Hall, and David Brown Hall.

LIBRARIES.

The Chancellor Green Library.

Organization: Ernest C. Richardson, Librarian; V. L. Collins, Librarian's Secretary; Miss C. Martins, in charge of Reference and New Book Departments; Miss C. B. Joline, Chief Cataloguer; Miss S. A. Vinton, Periodicals; R. H. Peabody, Accessions; Miss E. G. Hyde, Delivery Clerk; Miss Mershon, Mr. Cottrell.

The College library began with the College itself, in a bequest of books by Governor Belcher. The first catalogue, printed in 1760, shows that it then consisted of more than twelve hundred volumes. It suffered much during the Revolution and it was burnt, with Nassau Hall, in 1802. The gifts of many liberal friends soon re-established it, and it slowly advanced to 9,313 volumes in 1854. The want of resources for its increase kept it small, until the Elizabeth fund of $50,000 was created by Mr. John C. Green in 1868. When the present library building was erected by him, in 1872–73, the collection contained about 25,000 volumes. The library at present contains 95,000 volumes, and perhaps 25,000 unbound periodicals and pamphlets. It is broadly divided into the Main Library, the Alumni collection, the Civil War collection, the Princeton College collection or "Archives," the Kept books, and the Periodical collection. It is probably strongest in the de-

partments of mathematical, physical, natural and mental science, but it is rich, also, in philology and literature, especially in works on the origin and early history of the English language. Generous efforts have been made to enrich it with the serial issues of scientific associations abroad.

The library building contains a large central room with alcoves, a large room to the west used for the meetings of Trustees, but at other times serving as a general Reading Room, three small rooms at the east end used chiefly for administrative purposes, and basement. The bulk of the main library is in the large room, and the remainder—about 15,000 of the less used volumes—in the basement. The current Periodicals are kept on file in the West room.

The Library hours are, during term time, from 8 A. M. until dark.

Books may be drawn by all officers and students of the College and Theological Seminary, and by others having special permission. The number of books which may be taken is limited to three in the case of students, with the exception of Seniors, who may take five. Officers, Fellows and Graduate students may take any reasonable number. The length of time during which books may be kept is two weeks. Fellows and Graduate students may retain for four weeks, and Officers for any reasonable time. All books may be renewed when due, unless they have been asked for by some one else. Reference books (including books temporarily withdrawn from general circulation for debates, essays, or similar purposes) may be taken over night, *i. e.*, between 4 P. M. and 8:30 A. M.

The catalogues consist of a printed subject catalogue, extending to 1884, a written author card-catalogue in two alphabets, a card-catalogue of subjects, and a special printed card-catalogue of the Class of '83 library. These are found on the catalogue desks, on the south side of the main room.

The Hall Libraries.

The two Literary Societies—Whig and Cliosophic—have catalogued libraries of 10,000 volumes or more each, and the religious society, the Philadelphian, one of 800 volumes.

The Theological Seminary Library.

The library of the Princeton Theological Seminary, which contains 55,000 volumes, is open to the students of the College for con-

sultation and loan of books on Monday from 12 M. to 1 P. M. and from 2 P. M. to 4 P. M., on Tuesday, Wednesday, Thursday and Friday from 10 A. M. to 1 P. M. and from 2 to 4 P. M., and on Saturday from 10 A. M. to 1 P. M.

SUMMARY OF LIBRARIES.

The Chancellor Green Library,	95,000
Hall Libraries,	21,000
Seminary Library,	55,000
Total (exclusive of pamphlets and duplicates),	171,000

MUSEUMS.

The E. M. Museum of Geology and Archæology.

This Museum, occupying the central and eastern wings of Nassau Hall, contains collections which are distributed in the three general departments of Geology (including Mineralogy), Palæontology and Archæology. Their arrangement is especially adapted to the purposes of comparative study.

In the GEOLOGICAL DEPARTMENT a special room contains a unique collection of over 5,000 specimens of erratic boulders and drift materials from Switzerland. There is also a special room devoted to the typical rocks and fossils of the State of New Jersey. A collection of the typical rocks of the State of New York represents the series as described in the Geological Survey of that State.

There is in this department a large collection of minerals, chiefly crystals, containing about 2,600 specimens, bequeathed to the College by the late Archibald MacMartin, of New York. The perfection of the specimens, and the number of localities represented in each family, make this collection one of special value.

PALÆONTOLOGICAL DEPARTMENT.—The upper or eastern hall contains the main collection; on the platform are the skeletons of a Mastodon, an Irish Deer, a Cave Bear, and some of the extinct birds of New Zealand; also the skulls of Uintatherium and a remarkably complete skeleton of Cervalces. There are mounted casts of the gigantic reptiles and mammals of the secondary, tertiary and quaternary ages. Surrounding the room is a very perfect collection of vertebrate and invertebrate fossils from Europe and

America, illustrating the principal organic forms of all the geological epochs. The typical fossils selected agree, as far as possible, with those mentioned in Dana's Geology, as characteristic of different geological periods. Included in this series are the fine eocene and miocene fossils, many of which are type specimens, procured in the West by the various Princeton collecting parties. There is also a series of fossil insects and plants from Colorado, most of which are also types. Altogether the number of fossils, not counting duplicates, is 15,000.

ARCHÆOLOGICAL DEPARTMENT.—Here are relics of the Swiss lake dwellings, and numerous implements of stone and bronze from Denmark; also several hundred flint instruments from most of the classical localities of the palæolithic and neolithic ages of France.

America is represented by the pottery and human remains of the mound builders, by several hundred specimens of Mexican and Peruvian pottery, and by a number of recent Indian relics. The interesting ethnological collection of objects, chiefly from Alaska and New Mexico, which Dr. Sheldon Jackson presented to the Theological Seminary of Princeton, has been transferred to this Museum by the Trustees of that institution. with the consent of the donor. There is also a series of models of the cliff-dwellings and Pueblos of the Southwest, executed under the direction of Dr. Hayden.

Below the eastern hall are the lecture and working rooms.

Museum of Biology.

The biological collections have been chiefly made from the endowment fund of the John C. Green School of Science. There have also been many smaller donations to the Museum from time to time. The collections are placed in the large upper hall of the School of Science building, and are at present especially rich in osteological specimens. On the same floor are the laboratory and working rooms of the Curator of the Museum. The collection of vertebrates includes a large number of mounted and disarticulated skeletons of mammals, reptiles, birds and fishes, a series of the birds of New Jersey and of other districts of North America, carefully mounted, and alcoholic specimens. A feature of the ornithological collection is the very large number of unmounted bird skins,

arranged for the purpose of comparative study of the plumage, beak and feet. Among the invertebrates are a series of ascidians, echinoderms, molluscs, crustaceans, insects, worms, corals, sponges, and microscopic preparations of small forms. Students may apply to the Curator for access to the catalogue and cases containing the skeletons.

The Herbarium is on the second floor of the School of Science building, and is arranged as a museum of the botanical collections, also as a working laboratory for students. The plants are classified according to Bentham and Hooker's *Genera Plantarum*, and include specimens from the different sections of the United States, and from South America, Europe and Australia. There are extra specimens for laboratory use and dissecting, together with compound microscopes, reagents, anatomical instruments, section cutters, models, diagrams and books of reference; and the reference library of the late Professor Leo Lesquereux, presented to the College by Mr. P. W. Huntington of Columbus, Ohio.

The Museum of Historic Art.

The upper story of the new museum has been sufficiently finished to serve the purpose of exhibition. Mrs. T. Harrison Garrett has kindly arranged for a series of exhibitions of her fine collection of prints. About eight hundred engravings have been put on exhibition in 418 frames.

The present exhibition is remarkable for early states and choice impressions of well-known masterpieces, selected for the purpose of giving as complete an impression as possible of the varied range of artistic qualities and technical execution in the various processes and by all schools from the fifteenth century to the present. One room is devoted especially to a fine series of representations of the Holy family; the most conspicuous being four plates of Raphael's Sistine Madonna. The early German masters and Rembrandt, the French school of portraiture from the XVII to the XIX century, the mezzotints of the English school, the Italian school of Raphael Morghen and the modern etchers are the most prominent groups in the exhibition.

In the central story the Trumbull-Prime collection has been rearranged and new cases have been added. The purpose of this collection is to illustrate the history of pottery and porcelain.

Egypt is represented by sepulchral figurines, beads and amulets, Phœnicia by numerous Cypriote vases, Greece, Etruria and Southern Italy by Corinthian aryballoi and fine examples of larger vases of black-figured and red-figured types. The Orient is further illustrated by specimens from Persia, China and Japan; South America by Peruvian pottery. The collection is richer in examples of European wares, to which England, France, Germany and Holland are the chief contributors, but Italy, Russia, Sweden and Switzerland are also represented. The collection comprises about twenty thousand specimens. Besides the Trumbull-Prime collection there are reproductions of Greek and Roman coins and gems, a collection of bronze medals and casts of ivories from the Roman to the Gothic period.

The basement is occupied by a carefully selected collection of casts of ancient and medieval sculpture, presented by the class of 1881 at its decennial. This collection was formed to illustrate the history of ancient sculpture in Egypt, Babylon and Assyria, Persia, Greece and Rome, and of medieval sculpture in Italy, France and Germany.

The janitor of the chapel will open the museum to visitors in the afternoon.

Mathematical Models.

In the Graphics room of the School of Science may be found the Brill plaster models of higher algebraic surfaces; a set of duplicates of the more important Olivier models of ruled surfaces; the Björling developable surface models, a number of the Muret set and the Schröder mathematical models.

LABORATORIES AND APPARATUS.

Psychological Laboratory.

The laboratory for experimental psychology was founded and equipped for work at the beginning of the academic year 1893–'94. It occupies a suite of rooms on the third floor of the west wing of North College, on the south side, opposite the histological laboratory. It comprises five rooms, *i. e.*, a dark room, an optical room,

an acoustic room, a reaction and muscle-sense room, and a room fitted up for demonstrations and practical work. The equipment consists primarily of the standard pieces of apparatus for demonstration and research, together with illustrative models and charts; and it is expected that it will be added to as the development of the department in special directions makes it necessary. A small library is connected with the laboratory, the most important contributions to which during 1893-'94 were a complete set of the neurological journal *Brain* (16 vols., presented by Messrs. Macmillan & Co.) and the catalogue of the U. S. Surgeon General's Library (6 vols., presented by the Surgeon General, Dr. Billings).

Physical Laboratory and Apparatus.

The physical laboratory is fitted up with tables and other arrangements to accommodate about forty students at once, though the classes usually work in small divisions, to facilitate the arrangement of the course in logical order and to avoid interference with the hours allotted to other courses.

The collection of apparatus for lecture demonstrations is a very good one, but as far as practicable the equipment consists of instruments which are serviceable not only in the lecture courses but in the practical laboratory work. The collection contains most of the standards and instruments of precision that are needed by the advanced student or investigator. The shop connected with the School of Science is at the service of the department of physics and apparatus needed for special researches may be constructed there.

Buildings and Apparatus of the School of Electrical Engineering.

The magnetic observatory is a brick building without iron in its construction, situated on Washington street, in a position in which it is, as far as possible, free from the disturbing influences of large masses of iron. The main laboratory is in the basement. On the first floor are a reading room and a private laboratory, and on the second floor is a large room, which is used for special investigations. Among the instruments in the laboratory which deserve special mention are: a large physical balance, Thomson's quadrant electrometer, Thomson's electrostatic electrometer, specially con-

structed galvanometers by Edelmann, Hartmann, and Elliott, Thomson's ampere balances, two large resistance boxes, adjusted by Anthony. Besides these, there is a full outfit of galvanometers, voltmeters, ammeters and all other instruments needed either in technical work or in exact investigation.

The dynamo building stands on the corner of Washington and William streets. It is connected with the School of Science building. The motive power for the machinery is furnished by a sixty horse-power boiler and a Ball engine. The dynamo plant, at present, consists of a Westinghouse alternate current machine with full set of transformers, a Mather, an Edison, a Brush arc, an Eichemeyer, a Gramme, a machine constructed in the workshop of the School of Science, Brush and Eichemeyer motors. With these machines is a complete outfit of accessories, and a large rheostat of German silver used in testing the machines and for measurements. Arc and incandescent lights are so arranged that the various systems of distribution may be studied.

The dynamo building is connected with the magnetic observatory by heavy copper wires, so that the instruments of the observatory are available for experimental work with the dynamos. Four sets of storage batteries are also connected with the plant.

Chemical Laboratories.

The laboratory and cabinets of the department of General Chemistry are fully equipped for the illustration of the courses in the two branches of general and applied chemistry.

The entire department of Analytical Chemistry and Mineralogy has been transferred to the new chemical laboratory, which is an admirably lighted and ventilated fire-proof building, the main portion of which is 108 feet long and 58 feet wide, with a wing 47 feet long and 42 feet wide. It has been planned and equipped after a careful study of many of the best laboratories at home and abroad. The top floor is entirely devoted to laboratories for students in the undergraduate courses, with private rooms for the professor and assistants, weighing room, reading room and sulphuretted hydrogen room. Each student has a separate desk, provided with water, gas, suction for filter-pump, and sink.

In the second floor are two large lecture rooms, a room for experiments in chemical physics, two cabinets for specimens and lec-

ture apparatus, a mineral cabinet, a laboratory for advanced students and the professor's private laboratory.

In the basement are various rooms for gasometric work, and for experiments in technical and organic chemistry, which cannot conveniently be undertaken in the laboratories for general students, assay laboratory, work-shop, cloak room, janitor's room, store-rooms and battery.

Mineralogical Collections of the School of Science.

There are three cabinets of minerals. The principal one contains over five thousand specimens, embracing nearly every mineral species. Two smaller cabinets, one with labeled and the other with unlabeled minerals, are provided for practice with the classes, and to these two cabinets the students have free access.

There is also a collection of 240 specimens of typical rocks; together with a large number of Fuess's rock sections, as well as sections from other sources, for the study of lithology.

The department is provided also with section cutters, grinding lathes, and other appliances for the special study of minerals and rocks; including a complete Groth's polarizing apparatus with goniometer, a large Babinet goniometer, Norremberg's polarizing apparatus, Rosenbusch's microscope, and minor apparatus.

Histological Laboratory.

This laboratory is situated on the upper floor of the west wing of Nassau Hall. It is fitted to accommodate twenty-two students at a time, each of whom is provided with the requisite instruments, reagents and staining fluids for the study of the various tissues. The microscopes have been selected with a view to convenience in practical work. A large private collection of slides, illustrating the general subject of histology, is also placed at the disposal of the students, as well as books of reference and American and foreign publications. The laboratory is open at all hours to its regular students.

The Class of 1877 Biological Laboratory.

This building is situated at the east end of Dickinson Hall. It was presented to the College by the Alumni of the Class of 1877 at their decennial reunion. It is designed for the advanced practical

and experimental courses in comparative anatomy, embryology, and physiological psychology. The main morphological laboratory, upon the second floor, is equipped for the instruction of undergraduate students, with a private room and special library of reference books adjoining. The first floor comprises the embryological laboratory, intended for the use of University students engaged in research, and is in charge of the Class of 1877 Fellow in Biology; also the bacteriological laboratory for instruction and experimental work in bacteriology. The basement is designed for aquaria. The laboratory is open to students during the day from 8 A. M. to 6 P. M., and in the evening, subject to special regulations.

The Palæontological Laboratory.

This laboratory has been fitted up in Nassau Hall to provide for practical instruction in the courses in palæontology. Each student has a table with drawers, etc., for his own use, where the study of fossil forms can be conveniently carried on. The very extensive collections of the geological museum furnish ample material for the general course in palæontology, stratigraphy, as well as for the purposes of research. A series of diagrams, maps and models is provided, as are also microscopes and prepared slides for the examination of the minute structure of various extinct forms, both animal and vegetable.

For advanced students engaged in original investigations, there are private rooms available.

Civil Engineering Laboratory and Apparatus.

The laboratory is used in connection with the instruction in Experimental Mechanics and the Planning and Construction of Engineering Works and contains a torsional testing machine; a wire and cement tester; various kinds of current meters and water gauges; a Worthington water meter; a contrivance for determining the hydraulic slopes within earthen retaining banks; a flushing tank; a reaction wheel and other minor pieces of hydraulic apparatus; a double acting steam pump; a locomotive link and valve motion; a ten horse-power compound engine with condenser, indicators, gauges and a Prony brake; and a 25-foot iron working model of a single track railroad bridge, with a complete outfit of false-works and other appliances for its erection, designed especially for this College.

The illustrative apparatus of the laboratory comprises rail sections and joints; specimens of the products of iron and steel mills and other building materials; a Sturtevant blower; models of water wheels, of trestles, of the details of iron bridge and roof joints, and of vaults and arches. A collection of lantern slides, especially selected for use in the class room, has been provided and includes a large number of views, in detail, of the East River suspension bridge at different stages of its progress.

The instruments provided for the course in Geodesy represent the work of twelve different firms of high repute, care being taken to avoid the duplication of instruments by the same maker, and includes a twelve-inch geodetic transit, a large plane-table with telescopic alidade and a telemeter; engineer's mining and solar transits; wye and dumpy levels; surveyor's compasses; mercurial and aneroid barometers; sextants; heliotropes; various forms of linear measures, and a large assortment of reconnoitring instruments.

ASTRONOMICAL OBSERVATORIES.

The Halsted Observatory.

This is appropriated to scientific work, chiefly in the department of astronomical physics. The building is of stone, with an iron dome thirty-nine feet in diameter, the power for moving it and its sliding shutter being furnished by an electric motor and storage battery. The principal instrument is the great equatorial, of twenty-three inches aperture and thirty feet focal length, made by the Clarks. It is provided with all the usual accessories, the outfit being rendered especially complete by the recent gift of a spectroscope of the highest power, fitted for both visual and photographic work. The building also contains a clock and a chronograph, and is in electric connection with the Observatory of Instruction.

The Observatory of Instruction.

This establishment is devoted entirely to the use of students, and is fully equipped for its purpose. It possesses an equatorial (by Clark) of 9½ inches aperture, with a full complement of spectroscopic and other accessories. It has also a 9-inch reflector; a me-

ridian circle with circles 2 feet in diameter and a 4-inch telescope; two transit instruments with 8-inch telescopes, both of them arranged for use as zenith telescopes; a 3-inch prime-vertical instrument; a chronograph; two standard clocks, and two chronometers. There are also a number of sextants, and all the other subsidiary apparatus required for carrying out the work involved in the courses on Practical Astronomy. See Astronomy 5, 6, page 56.

THE ISABELLA M'COSH INFIRMARY.

The Infirmary now completed was planned by Surgeon-General Billings, and contains all the modern arrangements of the best hospital construction. The building is pleasantly located on Washington street, commanding every advantage of position as to air, outlook and sewerage. Besides ample accommodation for matron, nurses, and patients, it has rooms available for friends of sick students. While the health of Princeton is exceptionally good, the occasional illness incident to so large a body of students demanded accommodation suitable for its care. This has been secured in the Infirmary by the liberality of friends of the college.

It has been furnished and is now, under the care of Mrs. Therese B. Hill as matron, open to the reception of students on certificate of attending physician.

ALEXANDER HALL.

This handsome and substantial building is the generous gift of Mrs. Charles B. Alexander and is named in honor of her husband's distinguished ancestors. The building has been founded for Commencement and Class Day exercises, public lectures, and other university gatherings of a general character. As an auditorium it is admirably arranged with sloping floor and high gallery, enabling an audience of fifteen hundred to be comparatively near the speakers. A marked feature of the internal decoration is the polychromatic mosaic and marble finish of the rostrum and of the baldachino, which

serves as a President's throne. The beauty of the interior will be even more effective when the mosaic wall pictures behind the rostrum shall have been put in place.

Externally, the building presents a massive appearance, being constructed of granite and brown stone in the Romanesque style of western France. The front of Alexander Hall toward the south exhibits a large rose window beneath a gable roof, and between the central structure and two side towers are two fine round-arched openings which lead into a wide ambulatory encircling the building. From this ambulatory the rostrum and auditorium are reached. The two side towers and two smaller ones at the rear enclose staircases, which lead to the auditorium gallery. The building, which has been designed by William A. Potter, is being decorated with sculpture under the direction of J. Massey Rhind. Beneath the rose window is a seated figure of Learning, on one side of which are allegorical figures of Architecture, Sculpture, Painting, Poetry, Music, and Belles Lettres, on the other are Oratory, Theology, Law, History, Philosophy, and Ethics. Other sculptures about the rose window and in the niches around the ambulatory will be added in the near future.

GYMNASIUM.

The gymnasium was built in 1869 by Mr. Robert Bonner and Mr. Henry G. Marquand. It contains, besides the main hall with the apparatus for physical training, hot and cold shower and plunge baths, dressing rooms, bowling alleys, and a gallery for visitors. The gymnasium is open daily from 10 A. M. to 7 P. M. throughout the year. During the first term three exercises a week are required of all members of the Freshman class. From November to April, general class exercises are held daily at noon and also at 5 P. M. on Mondays, Tuesdays, Wednesdays and Thursdays. These exercises are adapted to all grades of strength and are such as to maintain and improve in health all who take part in them.

Special training on the various apparatus is given under the personal supervision of the superintendent. From April to the close of the year, advanced exercises are taught to those desiring

to take part in them, and at Commencement there is a gymnastic exhibition. During the year there are four athletic meetings for prizes.

THE UNIVERSITY ATHLETIC GROUNDS.

This field is spacious, complete in its appointments and less than a quarter of a mile from the College. There is room on the turfed portion for two games simultaneously of either baseball or football. The cinder track is about half a mile long, with carefully calculated curves. Within the enclosure are: 1. A large winter practice house, built of brick, with a clear floor space of 60 by 140 feet; 2. A club house containing the necessary dressing rooms; 8. A large and handsome grand stand, the gift of Mrs. J. J. McCook of New York, which has a seating capacity of 750 and a tower clock in one of its gables. On the field is the Osborn club house, the gift of Professor Henry Fairfield Osborn, of the class of '77, in which are the necessary bath rooms, training tables, etc., for the use of the athletic teams.

GENERAL COLLEGE ORDERS.

TERMS AND VACATIONS.

The year is divided into two terms of eighteen weeks each. (See Calendar, pp. 5, 6.)

The first term of the present College year (1894–95) began on Wednesday, the 19th of September, 1894, and ends on Wednesday, the 6th of February, 1895. The second term begins on Thursday, the 7th of February, 1895, and ends on Wednesday, the 12th of June, 1895, the day of the Annual Commencement.

Students are not allowed to leave College during term-time without express permission obtained from the Faculty or from the officer of the class to which they belong.

REGULATIONS CONCERNING REGISTRATION.

At the beginning of the College year each undergraduate student shall report in person at the Registrar's Office, before 1 P. M. of the first Thursday of the term, and register

a. his full name, home address and College address—

b. his choice of electives for the term.

Entering students shall register when they matriculate.

After the Thanksgiving recess, the Christmas vacation, and the Easter recess, the student shall report in person at the Registrar's Office, before 5 P. M. of the day on which exercises are resumed, and register his name.

The choice of electives for the second term must be reported in writing to the Registrar, on or before the third Monday in January.

The student who does not register in accordance with the above rules will not be allowed to register until he has received special permission from his class officer.

In every case of delay in registration the student's gratuity shall be reduced by *three* for each day that the registration is delayed. Serious cases shall be punished by postponement of the registration with corresponding reduction of the gratuity, by putting the student on probation, by suspension, or otherwise as the Faculty may determine. The penalty for delay in reporting the full list of electives for the term shall be the reduction of the gratuity by one each day for each elective not reported, until the list is complete ; this delay to be reckoned from the registration at the beginning of the College year or from the third Monday in January. Serious cases shall be punished more severely as the Faculty may determine. If the student enter any elective class after exercises with that class have been held, he shall be reported by the instructor as absent from those exercises.

COMMENCEMENT EXERCISES.

THE ANNUAL COMMENCEMENT takes place on the Wednesday preceding the last Wednesday but one in June.

THE BACCALAUREATE SERMON of the President to the graduating class is delivered in the College Chapel on the Sunday preceding Commencement.

The Class Day exercises of the graduating class, and the Junior oratorical contest are held on Monday preceding Commencement. The reading of theses by the graduating class of the School of Science, the annual meetings of the Literary Societies, the annual meeting of the Alumni Association of Nassau Hall, and the Lynde prize debate are held on Tuesday.

PUBLIC WORSHIP.

Prayers are offered in the Marquand chapel every week-day morning.

Divine service, under the superintendence of the President, is held in the Marquand chapel, on Sunday, at 11 o'clock A. M. The service is conducted by the President, the Dean, the clerical members of the Faculty, together with occasional sermons from eminent divines from out of town.

Religious services are held in the chapel every Sunday afternoon at 5 o'clock.

Permission to attend divine service elsewhere than in the chapel, on special occasions, is granted on application to the President. For permission to attend regularly one of the churches of the town on Sunday morning, a written request from the parent or guardian of the applicant must be presented to the President.

RELIGIOUS INSTRUCTION.

During the first term the President will meet all the students for religious instruction every Saturday at the hour of morning prayers.

Bible is a required study for the Freshman class during both terms.

A Junior and Senior elective class for the study of the Bible, under the care of Professor Hibben, meets twice a week during both terms.

PUBLIC LECTURES.

The interest of $10,000, presented by Mr. Spencer Trask of New York City, is available to secure the services of eminent lecturers to deliver public lectures before the College on subjects of special interest.

ATTENDANCE UPON COLLEGE STUDIES.

The several classes ordinarily attend three recitations or lectures every day, except Wednesday and Saturday, upon which days there are no College exercises in the afternoon.

Every undergraduate student is required to attend all College exercises in the chapel, to be present during the lectures and recitations of his class, and is expected to avail himself of the privileges of the library and gymnasium upon the conditions and at the hours appointed.

Each student is allowed a certain limited number of absences from chapel and recitations during each quarter. When a student's absences exceed this gratuity they are charged against his gratuity for the next quarter, or otherwise dealt with by such discipline as the Faculty may direct.

CHARITABLE FUNDS.

THE RICHARDS FUND.—A bequest by Mrs. Esther Richards, of New York, amounting to $2,970.32, for the benefit of candidates for the ministry. Received in 1790.

THE LESLIE FUND.—A bequest of James Leslie, of New York, a graduate of the class of 1759, amounting to $10,677.49, for "the education of poor and pious youth with a view to the ministry of the Gospel in the Presbyterian Church." Received in 1792.

THE HODGE FUND.—A bequest of Hugh Hodge, of Philadelphia, of a house and lot on Market street, above Second (No. 205), "to be held by the Trustees in trust, to lease out from time to time, and the rents to be applied to the support and education of pious youth for the ministry." Received in 1805. The net income for the current year will amount to about $750.

THE VANARSDALE FUND.—A bequest of Robert VanArsdale, of Newark, N. J., of the class of 1826, amounting to $8,000, "in trust for promoting charitable instruction in the College of New Jersey, according to the discretion of the Faculty." Received in 1875.

ENDOWED SCHOLARSHIPS.

1–3.	The COLT Scholarships, founded by Roswell Colt, of Paterson, N. J.,	$3000
4.	The NEWKIRK Scholarship, founded by Matthew Newkirk, of Philadelphia,	1000
5.	The JOHN JOSEPH RANKIN Memorial Scholarship, founded by his father, Wm. Rankin, of Newark, N. J.,	1000
6.	The CRESSWELL Scholarship, founded by A. Cresswell of Kishacoquillas, Pa.,	1000
7.	The ISAAC R. RANKIN Scholarship, founded by Isaac R. Rankin, of Newark, N. J.,	1000
8.	The MUSGRAVE Scholarship, founded by Rev. George W. Musgrave, D.D.,	1000
9.	The COGSWELL Scholarship, founded by Rev. Jonathan Cogswell, D.D.,	1000
10.	The GREEN Scholarship, founded by Hon. Henry W. Green, LL.D.,	1000
11–15.	The LENOX Scholarships, founded by James Lenox, of New York,	5000
16.	The HODGE Scholarship, founded by Dr. Hugh L. Hodge, of Philadelphia,	1000

17. The A. B. BAYLISS Scholarship, founded by A. B. Bayliss, of Brooklyn, 1000
18. The HENRY J. VAN DYKE Scholarship, founded by George L. Sampson, of Brooklyn, 1000
19. The GREGORY Scholarship, founded by Dudley S. Gregory, of Jersey City, 1000
20. The FIRST PRESBYTERIAN CHURCH OF PEEKSKILL Scholarship, founded by members of the Church, 1000
21. The VAN VORST Scholarship, founded by Hon. John Van Vorst, of Jersey City, 1000
22. The JANEWAY Scholarship, founded by the Rev. Jacob J. Janeway, D.D., 1000
23. The PRESBYTERIAN CHURCH OF HUNTINGTON, L. I., Scholarship, founded by the ladies of the Church, 1000
24. The BACKUS Scholarship, founded by E. F. Backus, of Philadelphia, 1000
25. The VAN SINDEREN Memorial Scholarship, founded by Mrs. and Miss Van Sinderen, of Brooklyn, 1000
26. The NORRIS HALSTED Scholarship, founded by Gen. N. Norris Halsted, of Newark, N. J., 1000
27. The MACLEAN Scholarship, founded by Drs. John and George M. Maclean, 1000
28. The HAINES Scholarship, founded by Richard T. Haines, of Elizabeth, N. J., 1000
29. The JACKSON Scholarship, founded by Hon. John P. Jackson, of Newark, N. J., 1000
30. The TUTTLE Scholarship, founded by Joseph N. Tuttle, of Newark, N. J., 1000
31. The GERTRUDE N. WOODHULL Memorial Scholarship, founded by her son, Dr. John N. Woodhull, of Princeton, 1000
32. The NATHANIEL W. TOWNSEND Memorial Scholarship, founded by his daughter, Mrs. Daniel Haines, 1000
33. The FIRST PRESBYTERIAN CHURCH OF BRIDGETON Scholarship, founded by members of the Church, 1000
34. The SKIDMORE Scholarship, founded by Joseph P. Skidmore, of New York, 1000
35. The SPENCER Scholarship, founded by L. S. Spencer, 1000
36. The JEREMIAH D. LALOR Memorial Scholarship, founded by a friend, 1000
37. The MARQUAND Scholarship, founded by Frederick Marquand, of Southport, Conn., 1000
38. The FIRST PRESBYTERIAN CHURCH OF TRENTON Scholarship, founded by members of the Church, 1000
39. The CAMERON Scholarship, founded by Hons. Simon and Donald Cameron, 1000
40. The SECOND PRESBYTERIAN CHURCH OF ELIZABETH Scholarship, founded by members of the Church, 1000
41. The C. S. BAYLISS Scholarship, founded by Charles S. Bayliss, of Brooklyn, 1000

42. The ELIZA MUSGRAVE GIGER Memorial Scholarship, founded by her son, Prof. George M. Giger, D.D., 1000
43. The BLAIR Scholarship, founded by James Blair, of Scranton, Pa., 1000
44. The PENNINGTON Scholarship, founded by Dr. Samuel H. Pennington, of Newark, N. J., 1000
45. The FENTON Scholarship, founded by Aaron Fenton, 1000
46. The TRASK Scholarship, founded by Alanson Trask, of Brooklyn, 1000
47. The WITHINGTON Scholarship, founded by Chandler Withington, of Kingston, N. J., 1000
48. The NEWARK Scholarship, founded by the will of Henry Rogers, of Newark, N. J., 1000
49. The CARTER Scholarship, founded by Aaron Carter, of Newark, N. J., 1000
50-54. The HOLMES Scholarships, founded by Capt. Silas Holmes, of New York, 5000
55. The COLWELL Scholarship, founded by Stephen Colwell, of Philadelphia, 1000
56. The AITKIN Scholarship, founded by John Aitken, of New York, 1000
57. The BULLARD Scholarship, founded by Mrs. P. Bullard, 1000
58. The CHARLES DICKINSON HAMILL Memorial Scholarship, founded by his father, the Rev. Samuel M. Hamill, D.D., 1000
59. The CYRENIUS BEERS Memorial Scholarship, founded by his daughter, Miss Julia Beers, 1000
60. The JACOBUS Scholarship, founded by Peter Jacobus, of Newark, N. J., 1000
61. The MATTHEW B. HOPE Scholarship, founded by the Trustees as an acknowledgment of the services of Prof. Hope in raising an endowment of over $100,000. 1000
62. The JOHN MACLEAN Scholarship, founded by a friend of President Maclean, 1000
63. The WHITE Scholarship, founded by William White, Esq., 1000
64. The ELIZABETH VAN CLEVE Scholarship, founded by the Hon. C. S. Green, of Trenton, N. J., 2000
65. The BLOOMFIELD Scholarship, founded by the Hon. Amzi Dodd, of Bloomfield, N. J., 1000
66. The FLAGLER Scholarship Fund, the gift of Henry M. Flagler, of New York City, 1500
67. The JAMES MCCOSH Scholarship, founded by friends of President McCosh in N. Y. City, 1000
68-69. The WISTAR MORRIS WOOD and CHARLES MORRIS WOOD Scholarships, founded by their father, the Rev. Charles Wood, D.D., of Germantown, Pa., 2000

70. The CLASS OF 1856 Scholarship,
founded by members of the Class of 1856, 1000
71. The CLASS OF 1841 Scholarship,
founded by members of the Class of 1841, 1000
72. The ALBERT DOD BROWN Memorial Scholarship,
founded by his mother, Mrs. Susan D. Brown, of
Princeton, N. J., 1000
73–82. The JONATHAN DICKINSON Scholarship,
The AARON BURR Scholarship,
The JONATHAN EDWARDS Scholarship,
The SAMUEL DAVIES Scholarship,
The SAMUEL FINLEY Scholarship,
The JOHN WITHERSPOON Scholarship,
The SAMUEL STANHOPE SMITH Scholarship,
The ASHBEL GREEN Scholarship,
The JAMES CARNAHAN Scholarship,
The FRANCIS L. PATTON Scholarship,
83–87. The KENNEDY Scholarships,
founded by Miss Rachel L. Kennedy, of New York, 15,000
88. The A. O. HEADLEY Scholarship,
founded by A. O. Headley, Esq., of Newark, N. J., 1000
89. The HARVEY LINDSLEY Memorial Scholarship,
founded by Mrs. Emeline Coney Lindsley, 1000
90. The BUTLER Scholarship,
founded by William Allen Butler, Jr., Esq., 1000
91. The BROKAW Scholarship,
founded by Isaac V. Brokaw, Esq., of New York, 1000
92. The EZRA NYE Memorial Scholarship,
founded by his son-in-law, F. Wolcott Jackson, Esq.,
of Newark, 1000
93. The GRACE NEWCOMBE DENNING Scholarship,
founded by Mrs. William Moir, of New York, 1000
94. Founded by a friend, 1000
95–96. The MCCORMICK Scholarships,
founded by Mrs. McCormick, of Chicago. 2000

The above scholarships are for the benefit of students in the Academic Department, with the exception of the ELIZABETH VAN CLEVE Scholarship, which may be assigned to a student in the School of Science.

About sixty scholarships were founded between the years 1858 and 1858, mainly through the efforts of President Maclean and Professor Hope. The last thirty-one were founded since the beginning of the Academic year 1885-6.

PECUNIARY AID.

For many years the College has, on application, remitted a portion of the tuition and other fees in the Academic Department of candidates for the ministry, of sons of ministers, and also of other applicants who present satisfactory testimonials of good moral character and of more than ordinary intellectual ability with the assurance that the aid requested is absolutely needed. In the case of students who are neither candidates for the ministry nor the sons of ministers, the remission of tuition is to be regarded as a loan to be repaid to the College whenever it can be without serious financial embarrassment. All students in the School of Science, with the exception of the incumbent of the ELIZABETH VAN CLEVE Scholarship, are required to pay tuition.

In consequence of the liberal policy of the College the amount of tuition remitted has increased until it is now more than double the entire income from the scholarship and charitable funds. If this policy is to be continued a large increase in these funds is urgently demanded. The Trustees have accordingly appointed a joint committee of members of the Board of Trustees and of the Faculty, to increase the Scholarship Fund to $150,000. *This effort is commended to the attention and favor of the Alumni and other friends of the College.*

Scholarships may be founded by the payment of $1000 and designated as the donor may direct, the income from which will be accepted as payment of the tuition in the Academic department of *any student* to whom the donor may assign it, for *four years*—to be subsequently assignable by the Faculty.

Application for scholarships, or for aid from the charitable funds, should be made to Professor Duffield.

EXPENSES.

The following is the Schedule of the College expenses for 1894–1895.

Board, 36 weeks	$ 3.00 to $7 per week.
Washing, 36 weeks	50 cents per week.
Tuition and public room fee, Academic	150.00 per annum.
Tuition and public room fee, School of Science	160.00 per annum.
Tuition, extra for Laboratory Chemistry, Senior elective	15.00 per annum.
Room rent (according to location of rooms)	30.00 to $175 per annum.
Fuel deposit (according to location of rooms)	17.00 to $26 per annum.
Gas deposit (according to location of rooms)	24.00 to $42 per annum.
Matriculation Fee, payable on entrance	5.00
Graduation Fee, payable second term, Senior year	12.00

For other special courses than that in Analytical Chemistry arrangements may be made upon consultation with the Professor in charge.

The charges for fuel and gas are approximations based upon the greatest amount used. An account of the actual consumption is kept with each room, and the exact charge is adjusted at the end of the year. The charge for fuel includes the cost of kindling, and the labor of carrying coal, making fires, etc.

Apparatus Deposits.—Students pursuing certain courses in the School of Science are required to make deposits to pay for apparatus injured or destroyed. At the end of the term any excess in favor of the student is placed to his credit on the bill for the next term. The deposits in the courses are:—Freshmen, first term, Geodesy, $3; Sophomores, first term, Geodesy, $5; Botany, $5 (not required 1894–95); second term, Chemistry, $12. Juniors, first term, Geodesy, $6; first term, Chemistry, *c.*, $12. Seniors, first term, Geodesy, $4; Chemistry, *e.*, $15; Chemistry, *g.*, $12; Chemistry, Acad., $8; second term, Chemistry, *c.*, $10.

Students taking any of the courses in Graphics will require a drafting outfit costing from $18 to $25.

ESTIMATES OF ANNUAL EXPENSES.

ACADEMIC DEPARTMENT.

Attention is specially called to the following approximate estimate of the necessary annual expenses for a student occupying an unfurnished room in College, without including clothes, traveling or vacation expenses:

	Min.	Medium.	Max.
Board, 36 weeks, at $3.00 to $7.00	$108.00	$180.00	$252.00
Washing, 36 weeks, at 50 cents per week	18.00	18.00	18.00
Tuition and Public Room Fees	150.00	150.00	150.00
Matriculation Fee (on Entrance)	5.00	5.00	5.00
Room Rent	30.00	60.00	175.00
Fuel	10.00	20.00	50.00
Gas		10.00	25.00
Total	$321.00	$443.00	$655.00
Deduct for Students on Scholarships	100.00		
See page 148.			
	$221.00		
Candidates for Ministry in special need of aid.	30.00		
	$191.00		

COLLEGE BILLS.

All College expenses, including board, must be paid in advance to the Treasurer of the College.

Students are required to call at the Treasurer's office in the course of the first ten days of each term, and to give information as to their place of boarding, etc., so that their bills can be made out. All bills must be paid within the first four weeks of the term. Failure to comply with this rule will deprive the student of the privileges of the College until payment is made, unless excused by special vote of the Faculty.

When a student enters College before the middle of the term, he shall pay in full the usual College charges for that term, with the exception of the charges for board and washing; if he enter after the middle of the term, he shall pay one-half. For board and washing he shall pay in proportion to the time.

When a student leaves the College, whether voluntarily or by dismission, before the middle of any term, one-half of the charges for tuition and public rooms for that term shall be refunded. But in the case of temporary absence and subsequent return, although the absence be for more than half a term, no such rebate shall be granted.

When a student is dismissed from College for any cause, the advance deposit for board, washing, fuel and gas, beyond the time of his dismission, shall be refunded to his parent or guardian.

When at the end of the first term the amount of the advance deposit proves to be in excess of the sum required to defray the board, washing or room bills of any student, the excess shall be credited on his bill for the next term. At the end of the College year the amounts overpaid by the members of the *graduating class* for board, washing, room rent, fuel, or gas shall be refunded by the Treasurer to the student's parent or guardian. The parent or guardian of *every undergraduate* will be advised of the amount of excess to the credit of his son or ward, and such amount will be *carried over to his credit on the bill of the first term of the following year.* In case of withdrawal or dismissal from College of any undergraduate, at the end of the college year such excess will be refunded by the Treasurer to the parent or guardian, when informed by the Clerk of the Faculty that such undergraduate has been withdrawn or dismissed from College.

RULES GOVERNING THE ALLOTMENT AND RENTAL OF ROOMS.

1. Rooms shall be assigned for occupation during the following college year between the 15th of May and the 1st of June of each year.

2. This assignment shall embrace all rooms occupied by students whose connection with the college will terminate at the end of the college year and all rooms occupied by such other students as have not renewed their lease. [See Rule 5, *b*.]

3. An allotment may also take place at the close of the first term of each college year for the purpose of assigning such rooms as may then fall vacant.

4 *a*. The assignment of rooms shall in all cases not herein specially excepted take place in such a manner that specific rooms shall be assigned by lot.

b. The rooms to be assigned shall be classified according to the amount of their rental in five groups as follows:

1. The first group shall embrace rooms whose rental is from $25 to $35 inclusive.

2. The second group shall embrace rooms whose rental is from $40 to $66 inclusive.

3. The third group shall embrace rooms whose rental is from $70 to $100 inclusive.

4. The fourth group shall embrace rooms whose rental is from $105 to $140 inclusive.

5. The fifth group shall embrace rooms whose rental is from $155 to $180 inclusive.

c. The applicants for rooms shall be divided into corresponding groups, each applicant being required to inform the Treasurer in writing before the 10th of May or the 20th of January, as the case may be, both of his intention to enter the drawing and of the group in which he wishes to be placed.

AMENDMENTS TO THE RULES GOVERNING THE ALLOTMENT AND RENTAL OF ROOMS.

Passed at a Meeting of the Board of Trustees, held on November 8th, 1894.

Catalogue, page 160.

Amendment to Rule 2. Strike out this Rule.

Rule 2 to read:

This assignment shall embrace:

(a) All rooms occupied by students whose connection with the college will terminate at the end of the college year.

(b) The rooms of all Seniors, whether with room-mate or not. (Unless the room may be retained as elsewhere provided in the rules.)

(c) All rooms for which the lease has not been properly renewed.

Catalogue, page 161.

Add to section f.

Section f (b), to read:

If the application for a double room shall be signed by students who have been members of college different lengths of time, it shall be classified, and placed in the drawing in which the student who has been a member of college the shortest length of time, would be placed.

Catalogue, page 161.

Section i to read:

(i) Whenever, for any reason, one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current college term, unless he agrees to pay the whole rent, or provides a room-mate who shall join him in signing a new lease for the remainder of the college year.

Catalogue, pages 162–163.

Rule 5, section (a).

To end of section add:

"This lease is made on the express condition that it may be terminated by said Trustees through their representative."

d. Each drawing shall begin with the first group and proceed from that group through the other groups successively in the order given above. Any applicant who does not obtain a room in the group to which he first asked to be assigned may be allowed to draw in any higher group.

e. If there be any rooms remaining unassigned after a drawing, such rooms may be assigned by subsequent allotment, at such time before the end of the year or of the term as the Treasurer may appoint; such supplementary allotment to be made under the same rules as the principal allotment, with this exception, that the rooms disposed of by means of it may be classified as above or not at the discretion of the Treasurer.

f. Priority in the drawing shall be determined by the length of time the applicants have been members of college. The first drawing shall include the names of all applicants who have been members of college for more than one year. A second drawing shall include the names of all applicants who have been members of college one year or less.

g. New students shall have choice of any rooms remaining vacant at the time of their entering upon residence in the order of their application after undergoing the entrance examinations for full standing, upon condition of immediately signing the lease required in all cases. [See Rule 5, *a.*]

h. Double rooms shall be separately classified and allotted in accordance with the above regulations. Only such suites as consist of a study and two bedrooms shall be considered double rooms within the meaning of this clause. No double room shall be assigned to a single individual, nor shall it be within the privilege of any single individual to draw for a double room. Every application for a double room must give the names of two persons who intend to occupy the room together and who undertake to be jointly responsible for the rent of the same.

i. Whenever, for any reason, one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current college term, unless he agrees to pay the whole rent, or provide a roommate who shall join him in signing a new lease for the remainder of the college year. When one of the occupants of a double room is a member of the Senior Class, the room shall become vacant when

the Senior graduates, and becomes subject to allotment as above unless the joint occupancy has continued for at least one college year.

5. *a.* The tenure and liabilities to those to whom rooms are assigned under these rules shall be the tenure and liabilities expressed in the following lease, which must be signed in the case of each room allotted by the student who is to occupy it and by his parent or guardian. This lease must be signed and delivered to the Treasurer in each case within ten days of the allotment, except in the case of new students, provided for under Rule 4, *g*.

This agreement made the day of , 189 , between the Trustees of the College of New Jersey and of witnesseth that the said Trustees of the College of New Jersey do hereby lease unto the said Room No. in the Entry of to hold for the college year of paying therefor during the said term unto the said Trustees of the College of New Jersey the yearly rent of $ in two equal payments, to be made, the one within the first four weeks of the first term of the college year, the other within the first four weeks of the second term of the college year.

And the said covenants to pay the said rent in the manner and at the times aforesaid and to deliver up the said premises to the said Trustees of the College of New Jersey or its legal representative at the end of said term in as good condition as the same now are or may be put into by the said Trustees of the College of New Jersey, reasonable use and wear and tear thereof, and fire and other casualty excepted. The said lessee also covenants that he will not do or suffer to be done any damage in the leased premises, and that, if any damage beyond reasonable wear and tear be done, he will cause the same to be made good as soon as possible at his own expense, employing for that purpose the proper college workmen, and paying the cost thereof at once to the College Treasurer, it being understood that the damage here meant includes the breakage of glass and locks, whether by accident or design. The said lessee further covenants that he will not sublet the same or any part thereof nor permit any other person or persons to occupy the same or any part thereof, nor make nor suffer to be made any alteration therein without the consent of the said Trustees of the College of New Jersey for that purpose in writing first had and ob-

tained. And the said lessee further covenants that the said Trustees of the College of New Jersey through their authorized representatives may enter the said premises for the purpose of viewing or making improvements therein at any reasonable times in the day time, or at any other time for the legitimate purposes of college discipline.

b. Any occupant of a college room may retain his room until the end of his college or graduate course provided he annually notify the Treasurer of his intention of retaining it and sign a new lease before the 1st of May. Otherwise his room shall be considered vacant and shall be included in the next allotment. In case an occupant of a double room be left without a room-mate at the end of the college year, he may renew his lease upon condition of naming another student of the college who will become joint lessee with him for the following year. It shall also be the privilege of any occupant of a college room to renew his lease at the end of his own tenure in the name of his brother, when that brother is to enter college immediately.

c. The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of the occupant of a college room to sell or transfer, directly or indirectly, his right of occupancy shall be deemed a fraudulent transaction, and will be dealt with by the Faculty as a grave breach of college law.

d. The occupant of a college room shall deposit with the Treasurer the sum of 25 cents for each key to his room that may be furnished him by the college; and all amounts paid under this clause shall be refunded upon the return of the key or keys furnished.

6. Students vacating college rooms shall be allowed to store any furniture not disposed of in a room designated by the college authorities, under the charge of a salesman appointed by the college, where it may be offered for sale. Furniture remaining unsold at the end of four months after the date of storing shall be disposed of at public auction to the highest bidder.

7. No exchange of rooms shall be allowed unless formally sanctioned in writing by the Treasurer; and then only upon terms explicitly stated in a written application signed by both parties to the proposed exchange, and not in contravention of the spirit of these rules. Such applications shall be kept on file in the Treasurer's office.

8. When rooms are vacated during a term the rent shall be paid until the end of the term. An occupant of a college room who expects to be absent on leave for a term may be released from the obligations of his lease, provided he notify the Treasurer before the beginning of the term during which he expects to be absent, and give up the room; but no abatement or drawback of room rent shall be allowed for any period less than a college term, except in special cases, to be stated in writing, and by permission of the Treasurer.

9. TEMPORARY RULE.—All students occupying college rooms not in Albert B. Dod Hall at the time the foregoing rules go into force, shall be allowed to vacate the rooms they then hold in accordance with the rules in force when they entered upon their occupancy. But all rooms in Albert B. Dod Hall shall come at once under the foregoing rules.

Adopted by the Committee on Grounds and Buildings, February 9th, 1891.

STUDENTS OF THE COLLEGE.

GRADUATE STUDENTS.

N. B.—Fellows are not included in the following list. (Vide p. 22.)

Fred Earl Andrews, Bergen, N. Y., 208 H S
A.B., University of Rochester, 1893.

John Bridge Appel, Hyde Park, N. Y., 3 B S
A.B., Franklin and Marshall, 1884.

William Park Armstrong, Jr., Selma, Ala., 30 A S
A.B., Princeton, 1894.

John Bamford, Portrush, Ireland, 39 B S
Queen's College, Belfast; Assembly's College, Belfast.

Alfred Hamilton Barr, Dillsburgh, Pa., 28 A S
A.B., Princeton, 1889; A.M., 1892.

Thomas Franklin Barrier, Eureka, Kan., 76 B S
A.B., College of Emporia, Kan., 1893.

Robert William Blake, Princeton, N. J., Leipsic
A.B., Princeton, 1887; A.M., 1890.

James Boddy, Wrightsville, Pa., 28 Green St.
A.B., Lincoln University, 1890.

William James Jarard Bowman, Trenton, N. J., Trenton
C.E., Princeton, 1888.

Frank Denison Breed, Emporia, Kan., 78 B S
A.B., College of Emporia, Kan., 1893.

James Maclin Brodnax, Mason, Tenn., 29 B S
A.B., Princeton, 1894.

John Milton Brooks, Cleveland, O., 50 Nassau St.
A.B., Princeton, 1889; A.M., 1891.

John Alexander Brown, New Windsor, Md., 73 B S
A.B., New Windsor College, Md., 1893.

Kenneth Brown, Brooklyn, N. Y., 315 H S
A.B., Princeton, 1893.

Nathan Thomas Brown, Morrisville, Pa., 25 B S
A.B., Princeton, 1891; A.M., 1894.

John Calvin Bucher, Dillsburg, Pa., 82 A S
A.B., Princeton, 1890.

Robert Paterson Byers, Gananoque, Ont., 44 B S
A.B., Queen's University, Kingston, Ont., 1893.

Vernon Clyde Byers, Chicago, Ill., 63 B S
A.B., College of Emporia, Kan., 1892.

James Daniel Cameron, Annapolis, N S., 42 B S
A.B., Princeton, 1893.

William Merritt Carle, Topeka, Kan., 114 Mercer St.
A.B., College of Emporia, Kan., 1894.

Benjamin Franklin Carter, Montclair, N. J., 24 Edwards Pl.
A.B., Princeton, 1894.

Harvey Steele Christian, Carlyle, Kan., 62 B S
A.B., College of Emporia, Kan., 1894.

Charles Alvin Cloud, Chili, Ind., 12 B S
A.B., Wabash College, 1894.

James Carpenter Coleman, Goshen, N. Y., 21 A S
A.B., Princeton, 1894.

Leonard Colyn, Pella, Ia., 56 B S
A.B., Grand Rapids College, 1892.

John Comin, New Concord, O., 9 Wiggins St.
A.B., Muskingum College, 1890.

William Seymour Crane, Cochecton, N. Y., 148 Mercer St.

Samuel Currie, Lisnagault, Ireland, 82 B S
A.B., Queen's College, Galway, 1893.

Lowndes Waldehear Curtis, Nashville, Tenn., 401 H S
South-Western Presbyterian University, Tenn.

Charles Dalzell, San Francisco, Cal., 72 B S
Leland Stanford University.

Winthrop More Daniels, Princeton, N. J., 5 S E B
A.B., Princeton, 1888; A.M., 1890.

Samuel Dickey, Oxford, Pa., 44 A S
A.B., Princeton, 1894.

Frederick Fee Dobson, Broylesville, Tenn., 49 B S
A.B., Washington College, Tenn., 1892.

William Henry Dodd, Garfield, N. Y., 18 B S
A.B., Princeton, 1893.

John Donaldson, Lisnaree, Ireland, 1 B S
A.B., Royal University of Ireland, 1894; Queen's Coll., Belfast.

James Ramsey Donehoo, Pittsburgh, Pa., 318 H S
A.B., Washington and Jefferson, 1889.

Thomas Corwin Doran, New Windsor, Md., 65 B S
A.B., New Windsor College, Md., 1893.

Harry Schwartz Ecker, New Windsor, Md., 69 B S
A.B., New Windsor College, Md., 1894.

Theodore Allen Elmer, Fairton, N. J. 16 B S
A.B., Lafayette, 1894.

Benjamin Howard Everitt, Jamesburg, N. J., 29 B S
A.B., Princeton, 1894.

Franklin Carver Everitt, St. Clere, Kan., 74 B S
A.B., College of Emporia, Kan., 1893.

Wallace Somerville Faris, Pittsburgh, Pa., 87 B S
A. B., Leland Stanford University, 1893.

Arthur Daniel Forst, Trenton, N. J., Trenton
Princeton, 1888.

Cleveland Frame, Philadelphia, Pa., 21 A S
A.B., Princeton, 1894.

Alexander Fraser, Achnadarroch, Scotland, 59 B S
A.B., College of Emporia, Kan., 1894.

George Fulton, Lexington, Ky., 26 A S
A.B., Centre College, 1893.

Robert Reed Gailey, Fawn Grove, Pa., 64 B S
A.B., Lafayette, 1893.

Zera Montgomery Gibson, Bruin, Pa., 66 B S
A.B., University of Wooster, 1893.

Samuel Gillespie, Ahmedabad, India, 52 B S
A.B., Royal University of Ireland, 1892.

John Morris Gillette, Girard, Kan., 52 B S
A.B., Park College, Mo., 1892.

Humphrey Gilbert Gratz, Waasis, N. B., 18 B S
A.B., Dalhousie College, 1892.

Charles Ernst Gubler, Bolivar, O., 6 A S
A.B., Indiana University, 1893.

Frederic Atherton Hamilton, Louisville, Ky., 117 H S
A.B., Hanover College, 1893.

Jacob Horehonnace Hammalian, Paterson, N. J., 51 B S
A.B., Park College, Mo., 1893.

Homer William Harris, Canaseraga, N. Y., 42 A S
A.B., Lake Forest University, 1894.

Alexander William Herdler, Princeton, N. J., 1 Nassau St.
University of Prague.

David Sutherland Hibbard, Wakarusa, Kan., 402 H S
A.B., College of Emporia, Kan., 1893.

John Washington Hoffman, Noblestown, Pa., 309 H S
A.B., Washington and Jefferson, 1892; Yale University, 1892.

William Charles Hogg, Bellaghy, Ireland, 39 A S
Magee College.

Joseph Howell, Pen Argyl, Pa., 10 A S
A.B., Lafayette, 1894.

Wilton Tyler Hudson, Greenville, S. C., 61 B S
A.B., Furman University, 1891.

Robert Bonner Jack, Hazleton, Pa., 44 A S
A.B., Princeton, 1894.

William McDougald Jack, Houtzdale, Pa., 57 B S
A.B., Lafayette, 1892.

Henry Ezekiel Jackson, Coatesville, Pa., 203 H S
A.B., Lafayette, 1893.

Archibald Balloch Jamison, Aberdeen, Md., 69 B S
A.B., New Windsor College, Md., 1893.

Paul Burrill Jenkins, Sioux City, Ia., 14 A S
A.B., Princeton, 1894.

William James Raphael Johnston, Cincinnati, O., 9 N M R
A.B., Princeton, 1894.

Ernest Farwell Keigwin, Wilmington, Del., 27 B S
A.B., Princeton, 1894.

Midori Komatz, Tokio, Japan, 166 Nassau St.
LL.B., Yale, 1894.

Ralph Henry Kunstadter, New York City, 2 Witherspoon St.
Oberrealschule of Budapest, 1890; Yale, 1891-94.

Thomas Cowden Laughlin, Princeton, N. J., 66 B S
A.B., Princeton, 1892.

Clifford McBride, Indianapolis, Ind., 44 A S
A.B., Princeton, 1894.

Charles Freeman Williams McClure, Princeton, N. J., 80 Univ. Pl.
A.B., Princeton, 1888; A.M., 1892.

Allen Woodend McCurdy, Peoria, Ill., 41 B S
A.B., Amherst, 1893.

Alexander McGaffin, Belfast, Ireland, 80 A S
A.B., Princeton, 1894.

John Archibald McKee, Remington, Ind., 46 B S
A.B., Wabash, 1894.

William Thomas McKinney, Fredericktown, O., 90 Canal St.
A.B., University of Wooster, 1894.

Kerr Duncan MacMillan, Mount Forest, Ont., 60 Canal St.
A.B., University of Toronto, 1894.

Hugh Scott McMullan, Banbridge, Ireland, 16 A S
A.B., Queen's College, Belfast, 1892.

John Moffatt Mecklin, French Camp, Miss., 15 Canal St.
A.B., South-Western Presbyterian Univ., Tenn., 1890; A.M., 1892.

Charles Anderson Mitchell, Bellevue, Neb., 58 B S
A.B., Bellevue College, Neb., 1892.

William Sands Morley, Oskaloosa, Kan., 402 H S
A.B., College of Emporia, Kan., 1893.

Charles Frederick Morrison, Dehra Dun, India, 19 Canal St.
A.B., Princeton, 1894.

Harry Newland Mount, Shannondale, Ind., 46 B S
A.B., Wabash College, 1894.

Isaac Stanley Mulholland, East Pittsburgh, Pa., 10 A S
A.B., Lafayette, 1894.

David Torence Neely, Honey Grove, Pa., 208 H S
A.B., Princeton, 1893.

Fred Neher, Princeton, N. J., 80 Univ. Pl.
A.B., Princeton, 1889; A.M., 1891.

Alexander Hamilton Phillips, Princeton, N. J., Stony Brook
B.S., Princeton, 1887.

Dwight Elwood Potter, Peabody, Kan., 2 Stockton St.
A. B., University of Kansas, 1892.

Samuel Dobbins Price, Newark, N. J., 19 B S
A.B., University of the City of New York, 1893.

Robert Livingston Rudolph, New York City, 17 Canal St.
A.B., University of the City of New York, 1892.

Gustavus Ulysses Sanford, Gibson, Pa., 17 A S
Wesleyan University.

Ephraim Cutler Shedd, Oroomiah, Persia, 306 H S
A.B., Marietta, 1893.

William Leonard Spiegel, Jr., Newport, Ky., 215 H S
A.B., Princeton, 1893.

John William Taylor, West Brownsville, Pa., 24 A S
A.B., Washington and Jefferson, 1892; Yale University.

John Thompson, Belfast, Ireland, 22 B S
A.B., Royal University of Ireland, 1893.

William Hogarth Tower, Brooklyn, N. Y., 14 A S
A.B., Princeton, 1894.

George Harvey Trull, Baltimore, Md., 22 Dickinson St.
A.B., Johns Hopkins, 1894.

John Marinus VanderMeulen, Holland, Mich., 11 B S
A.B., Hope College, 1891; A.M., 1894.

Nathan Frederick Van Horson, Mount Vernon, N. Y., 12 A S
A.B., Princeton, 1894.

George Handy Wailes, Salisbury, Md., 27 B S
A.B., Princeton, 1894.

Alfred Frederick Waldo, Birmingham, Mich., 42 A S
A.B., Lake Forest University, 1894.

Clement Edwin Babb Ward, Emporia, Kan., 77 B S
A.B., College of Emporia, Kan., 1892.

Howard Crosby Warren, Princeton, N. J., 10 Bayard Av.
A.B., Princeton, 1889; A.M., 1891.

Frank Allan Waterman, Princeton, N. J., 69 Prospect Av.
A.B., Princeton, 1888.

Robert Watson, Fredericton, N. B., 408 H S
A.B., Univ. of New Brunswick, 1893.

Israel Albert White, Summit, N. J., 109 H S
Princeton.

Clarke Benedict Williams, Corning, N. Y., Kalamazoo, Mich.
A.B., Princeton, 1890.

Clarence Russell Williams, Philadelphia, Pa., 217 H S
A.B., University of Pennsylvania, 1892.

Charles Robb Williamson, Ayr, Ont., 17 A S
A.B., University of Toronto, 1893.

GRADUATE STUDENTS, ... 110

STUDENTS IN THE ACADEMIC DEPARTMENT.

SENIOR CLASS.

Alexander Speer Andrews,	Zanesville, O.,	4 N R
Carrington Gindrat Arnold,	Providence, R. I.,	31 Nassau St.
Samuel Gilmorian Bailey,	Candor, Pa.,	9 Park St.
William James Baird,	Merion Station, Pa.,	85 Univ. Pl.
William Van Dyke Belden,	Princeton, N. J.,	6 N R
Ernest Graves Bergen,	Harbor Springs, Mich.,	14 N W
William Beveridge,	Minaville, N. Y.,	20 N E
Lynford Biddle,	Philadelphia, Pa.,	7 N D
Clarence Hamlin Bissell,	Milford, N. Y.,	2 N W
James Blair, Jr.,	Scranton, Pa.,	8 S W B
William John Bone,	Thorndale, Pa.,	1 N E
John Hall Bowman,	Plainfield, N. J.,	1 S M R
Frederick Clark Bradner,	Warwick, N. Y.,	18 S Ed
Dickson Queen Brown,	New York City,	9 W M W
Harry Oliver Brown,	Irwin, Pa.,	7 S M R
Joseph Shallcross Bunting,	Philadelphia, Pa.,	68 U
William Foster Burns,	Evanston, Ill.,	4 N W
Willis Howard Butler,	New York City,	1 S W B
Charles Lucius Candee,	Chicago, Ill.,	11 S W
Howard Doty Carpenter,	Hancock, Mass.,	42 S Ed
Ray Harrison Carter,	Philadelphia, Pa.,	21 N Ed
John Collings Caton,	Manchester, Eng.,	17 S M R
Charles Beach Condit,	West Orange, N. J.,	11 N Ed
Lester Morris Conrow,	Long Branch City, N. J.,	9 M D
Albert Samuel Cook,	Greencastle, Pa.,	18 N Ed
William Brown Cooke,	Wheeling, W. Va.,	12 N M R
Allen Wickham Corwin,	Middletown, N. Y.,	184 Nassau St.
Samuel G. Craig,	Tarkio, Mo.,	11 E W
Alfred Cramer, Jr.,	Cramer Hill, N. J.,	1 S W
John Forsyth Crawford,	Damascus, Syria,	215 Nassau St.

James Stoner Crawford,	Arch Spring, Pa.,	20 N E
Charles Clement Cresson, Jr.,	San Antonio, Tex.,	11 W B
Walter Raines Darby,	Plainfield, N. J.,	8 N M R
Charles Ernest Dechant,	Catawissa, Pa.,	6 N D
Daniel Weaver Dexter,	Elmira, N. Y.,	10 S R
Huston Dixon,	Trenton, N. J.,	10 W B
Arthur Dunn,	Chicago, Ill.,	10 N
Ernest Dick Egbert,	Franklin, Pa.,	8 E B
Edward Hilts Ewing,	Blairsville, Pa.,	19 S W
John Thomson Faris,	Pittsburgh, Pa.,	8 S E
Richard Milburn Farries,	Florida, N. Y.,	8 E B
Gordon Fisher,	Swissvale, Pa.,	11 N W
Charles Leon Fisk,	Wallingford, Conn.,	15 N M R
James Ralston Flemming,	Washington, D. C.,	82 & 83 U
Curtis Smiley Foster,	East Brady, Pa.,	29 N Ed
John Selby Frame,	Troy, N. Y.,	8 S D
Robin William Cummins Francis,	Cincinnati, O.,	7 N W
Demeter Nicola Furnajieff,	Macedonia,	11 N
Wilfrid Matchin Hager,	East Orange, N. J.,	3 & 4 U
Clarence Mitchell Hamilton,	South Orange, N. J.,	3 & 4 U
Edwin Dodge Hardin,	Boston, Mass.,	20 N W
John Cowden Harding,	Evanston, Ill.,	7 S D
Ellwood Harlow,	New York City,	18 N D
Robert Patterson Harris,	Princeton, N. J.,	256 Nassau St.
Norman Baldwin Harrison,	Caldwell, N. J.,	D, W B
Rollin Zeller Hartzler,	East Northfield, Mass.,	6 M D
Wallace Pinkney Harvey,	Baltimore, Md.,	7 W W
Richard Daniel Hatch,	New York City,	11 E B
Alfred Hayes, Jr.,	Lewisburg, Pa.,	12 W B
Selden Long Haynes,	South McAlester, I. T.,	1 W B
Charles Elvin Hendrickson, Jr.,	Mount Holly, N. J.,	9 S R
Gerardus Post Herrick,	New York City,	2 M D
Benjamin Lewis Hirshfield,	Steubenville, O.,	7 S Ed
Hugh Lenox Hodge,	Chestnut Hill, Pa.,	11 & 12 U
Edgar Holden, Jr.,	Newark, N. J.,	10 S M R
Edward Henry Hoos,	Jersey City, N. J.,	9 N D
Samuel Howe,	Chicago, Ill.,	1 W W
Thomas Hudson,	Waynesburg, Pa.,	5 Edwards Pl.
Edward Miller Hunt,	Trenton, N. J.,	18 S E

Theodore Sollace Huntington,	Columbus, O.,	11 N D
Paul Griswold Huston,	Cincinnati, O.,	6 N W
Andrew Clerk Imbrie,	New York City,	14 N E
Robert Alexander Inch,	Washington, D. C.,	82 & 83 U
Vernon Kremer Irvine,	Bedford, Pa.,	12 S D
Darwin Rush James, Jr.,	Brooklyn, N. Y.,	L, U
Francis de Haes Janvier,	Newcastle, Del.,	I, U
Edward Ford Johnson,	Michigan City, Ind.,	11 N D
Lucius Carter Kennedy,	Scranton, Pa.,	12 S E B
Richard Lea Kennedy,	Colorado Springs, Col.,	3 S D
Harvey Wilson Koehler,	Kingston, Pa.,	19 S M R
William Remsen Lane,	Orange, N. J.,	11 S M R
Thomas Leggate,	Allegheny, Pa.,	25 N Ed
Frederic Wheeler Lewis,	Wichita, Kan.,	1 W B
Walter Gillette Libby,	Summit, N. J.,	18 N E
William Henry Logan, Jr.,	Princess Anne, Md.,	17 N Ed
John Walterhouse Lord,	Baltimore, Md.,	7 W W
Robert Livingston Loughran,	Kingston, N. Y.,	11 N W
Leslie Clifford Love,	Montclair, N. J.,	3 E W
Victor Herbert Lukens,	Elizabeth, N. J.,	11 S E
William Hamilton MacColl,	Caledonia, N. Y.,	4 N Ed
Harold Fowler McCormick,	Chicago, Ill.,	16 M D
Stanley Robert McCormick,	Chicago, Ill.,	16 M D
Andrew Reed McNitt,	Siglerville, Pa.,	18 N Ed
Henry Augustus McNulty,	South Orange, N. J.,	18 N E
Henry Buck Master,	Philadelphia, Pa.,	11 S E B
Lawrence Porter Miller,	Gerardstown, W. Va.,	38 N Ed
William Hudson Morse,	Trenton, N. J.,	3 N E
Franklin Murphy, Jr.,	Newark, N. J.,	11 N D
William Cunningham Neill,	Warren, Pa.,	3 M D
Alexander Howard Nelson,	Chambersburgh, Pa.,	4 N E
Hugh Nelson,	Selma, Ala.,	I, U
Andrew Parker Nevin,	Philadelphia, Pa., 10 Dickinson St.	
John Sargent Newbold,	Philadelphia, Pa.,	8 W W
Edwin Mark Norris,	Corning, Ia.,	1 S D
Roy Lorton North,	Germantown, Pa.,	2 N D
Edward Roe Otheman,	New York City,	2 S E B
Jacob Schweighauser Otto,	Buffalo, N. Y.,	23 M D
Joseph William Park,	Corinth, Miss.,	4 S W

Christy Payne,	Titusville, Pa.,	6 E M W
Lewis Frederic Pease,	Germantown, Pa.,	2 N D
William Wirt Phillips,	New York City,	15 S Ed
Daniel Fellows Platt,	Englewood, N. J.,	4 E M W
Harry Morgan Post,	Brooklyn, N. Y.,	11 S E B
William Henry Roberts, Jr.,	Philadelphia, Pa.,	12 S W B
William Dee Robertson,	Cambridge, N. Y.,	1 S R
Robert Edwin Ross,	Chicago, Ill.,	4 S R
Thomas Ross,	Doylestown, Pa.,	11 E B
Warren Ilsley Seymour,	Pittsburgh, Pa.,	16 S E
Harry English Shaw,	Long Branch, N. J.,	9 M D
Arthur Mason Sherman,	Long Branch City, N. J.,	33 N Ed
Charles Sinnickson,	Philadelphia, Pa.,	14 & 15 U
Joseph Curtis Sloane,	Beaver Falls, Pa.,	23 S Ed
Edgar Mason Smead,	Oswego, N. Y.,	13 N
John Clarence Smith,	Asbury, N. J.,	13 N E
Fitzhugh Coyle Speer,	Pittsburgh, Pa.,	4 N R
Ernest Taylor Stewart,	Indiana, Pa.,	2 N R
William Ridgley Stone,	Washington, D. C.,	20 U
Clement Moore Summers,	Ottumwa, Ia.,	10 E B
Edward Forrester Holden Sutton,	New York City,	10 S W
Arthur Rodgers Teal,	Elizabeth, N. J.,	1 S W B
John Hamilton Thacher,	Kansas City, Mo.,	10 S R
Thomas Gawthrop Trenchard,	Church Hill, Md.,	60 Prospect Av.
Oliver Welton Upson,	Cleveland, O.,	15 N M R
Wilbur Marshal Urban,	Tunkhannock, Pa.,	2 S E
Frank Collins Van Sellar,	Paris, Ill.,	2 N R
Raymond Lynde Wadhams,	Wilkes Barre, Pa.,	5 S D
Charles Samuel Waldo,	Prattsburg, N. Y.,	A, E B
Philip George Walker,	Charleston, W. Va.,	30 U
William Douglas Ward,	Rochester, N. Y.,	6 S E B
Dexter Mason Ferry Weeks,	Webster, N. Y.,	11 S D
John Fox Weiss,	Harrisburg, Pa.,	8 N R
Arthur Register Wells,	Corning, Ia.,	1 S D
Robert Ralph Wherry,	Peking, China,	1 S E
George White,	Titusville, Pa.,	16 N E
Howard Erskine White,	New York City,	11 S W
Joe Billette White,	Butler, N. J.,	3 N D
Allan Derrick Williams,	Uniontown, Pa.,	4 N D

Linsly Rudd Williams,	New York City,	11 & 12 U
Louis Clayton Woodruff,	Southington, Conn.,	23 Dickinson St.
Francis Nicoll Zabriskie,	Princeton, N. J.,	52 Mercer St.
Robert Lansing Zabriskie,	Aurora, N. Y.,	12 S E

SENIORS, ... 151

JUNIOR CLASS.

Francis Olcott Allen, Jr.,	Philadelphia, Pa.,	79 U
Henry Beard Armes,	Washington, D. C.,	2 W W
William Mayo Atkinson,	Elizabeth, N. J.,	10 S E B
Frank Allen Baker,	Philadelphia, Pa.,	8 N R
Mason Brown Barret,	Frankfort, Ky.,	11 M D
Jacob Newton Beam,	Intercourse, Pa.,	8 S Ed
Andrew Jefferson Berry,	Augusta, Ga.,	21 M D
Edward Hodge Bishop,	East Orange, N. J.,	5 N E
Charles Byron Bostwick,	New York City,	12 M D
Laurance Foster Bower,	Pittsburgh, Pa.,	74 U
Carl Miner Bowman,	Philadelphia, Pa.,	5 E B
Robert Walter Brace,	Blackwood, N. J.,	16 N Ed
Edward Swayne Brearley,	Lawrenceville, N. J.,	89 N Ed
Charles Oscar Bressler,	Lebanon, Pa.,	8 S M R
Henry Clay Briggs,	Brooklyn, N. Y.,	14 N M R
Edwin Henry Bronson,	Philadelphia, Pa.,	1 N Ed
Macy Brooks,	Philadelphia, Pa.,	46 U
Charles Browne,	Philadelphia, Pa.,	9 E B
Henry Munro Bruen,	Belvidere, N. J.,	32 Mercer St.
James Bayley Bruen,	Belvidere, N. J.,	32 Mercer St.
Sydney Serrill Bunting,	Philadelphia, Pa.,	62 & 63 U
Thomas Cadwalader,	Philadelphia, Pa.,	19 M D
John McDowell Carnochan,	Towanda, Pa.,	6 S R
Pierce Annesley Chamberlain,	Bahia, Brazil,	41 N Ed
Philip Hudson Churchman,	Burlington, N. J.,	7 S R
Brutus Junius Clay, Jr.,	Paris, Ky.,	7 S W
James Blair Cochran,	Morristown, N. J.,	18 & 19 S Ed
Theodore Clifford Coe,	Newark, N. J.,	24 N Ed
Mordecai Jackson Crispin,	Berwick, Pa.,	U, U
Benjamin Dangerfield, Jr.,	Pittsburgh, Pa.,	68 Nassau St.
Samuel Boyer Davis,	Philadelphia, Pa.,	10 W W
John Ross Delafield,	New York City,	17 N E

Alfred Lewis Pinneo Dennis,	New York City,	13 E W
Edward Lewis Dodd,	Orange, N. J.,	86 Nassau St.
Alfred Abel Doolittle,	Hang Chow, China,	15 S M R
William Furman Doty,	Washington, D C.,	10 N E
Alexander Nelson Easton,	Summit, N. J.,	17 N W
David Farragut Edwards,	Jersey City, N. J.,	11 Dickinson St.
James Johnston Elliott,	Murfreesboro, Tenn.,	9 N R
John Pinney Erdman,	Morristown, N. J.,	2 S D
Charles Milton Evans,	Towanda, Pa.,	10 N
David Fentress,	Chicago, Ill.,	3 W M W
William Alexander Fisher, Jr.,	Baltimore, Md.,	19 M D
Thomas Galt, Jr.,	Aurora, Ill.,	18 & 19 S Ed
Nelson Burr Gaskill,	Mt. Holly, N. J.,	7 S E B
Thomas Logan Gaskill,	Mt. Holly, N. J.,	8 S Ed
John Randolph Graham,	Winchester, Va.,	22 S Ed
Eugene Gray,	Columbus, O.,	26 M D
Louis Herbert Gray,	Princeton, N. J.,	89 Vandeventer Av.
Meldrum Gray,	Columbus, O.,	26 M D
Woodward Keeling Greene,	Cedar Rapids, Ia.,	23 M D
Warren Jackson Haines,	Elkton, Md.,	8 S E B
Benjamin Schuyler Halsey,	North Paterson, N. J.,	5 E B
Edward William Hamilton,	New York City,	8 W B
George Gordon Hammill,	New York City,	K, U
Norris William Harkness,	Philadelphia, Pa.,	8 S W B
Edward Blanchard Hodge, Jr.,	Burlington, N. J.,	7 S R
Frederick Evans Hoffman,	Fort Wayne, Ind.,	9 S E
Alfred Muirheid Howell,	Cogan Station, Pa.,	12 S M R
Augustine Leftwich Humes,	Knoxville, Tenn.,	89 U
Alexander Jackson,	Berwick, Pa.,	2 E M W
William Herron Jamison,	Allegheny, Pa.,	14 Vandeventer Av.
Archibald Todd Johnson,	Philadelphia, Pa.,	C, E B
Clarence Melville Johnson,	Washington, D. C.,	5 N M R
Walter Lathrop Johnson,	Sing Sing, N. Y.,	22 Edwards Pl.
Gordon Johnston,	Birmingham, Ala.,	8 S E B
John Campbell Kerr,	Englewood, N. J.,	6 & 7 U
Alfred Gedney Killmer,	Bound Brook, N. J.,	8 S M R
Leroy Kirkman,	Port Jervis, N. Y.,	17 N W
James Carnahan Knight,	Chicago, Ill.,	4 S D
Robert Ryland Knight,	Shelbyville, Ky.,	12 N Ed

William Edmund Lampe,	Frederick, Md.,	1 S Ed
LeRoy Porter Leas,	Philadelphia, Pa.,	8 N R
William Wirt Leonard,	Salisbury, Md.,	14 M D
Robert Lincoln Litch,	Bethlehem, Pa.,	39 Nassau St.
Robert Forsyth Little, Jr.,	New York City,	5 & 8 U
Frederick William Loetscher,	Dubuque, Ia.,	31 S Ed
Joseph Mackey Roseberry Long,	Bangor, Pa.,	7 M D
John Hancock Louser,	Lebanon, Pa.,	3 N Ed
Albert Howe Lybyer,	Brazil, Ind.,	7 W B
Robert McNutt McElroy,	Lee's Summit, Mo.,	27 William St.
William Strong McGuire,	Norwalk, O.,	8 E M W
Scott McLanahan,	Chambersburg, Pa..	10 N D
Wallace Donald McLean,	Washington, D. C.,	13 S W
William Arnot Mather,	New York City,	10 N E
William Francis Mattingly, Jr.,	Washington, D. C.,	13 S W
Robert Maxwell,	East Greenwich, N. Y.,	37 N Ed
Albert Goodsell Milbank,	New York City,	5 & 8 U
Samuel Wilson Miller, Jr.,	Saltsburg, Pa.,	12 E B
Edward Kirkpatrick Mills,	Morristown, N. J.,	5 S W B
Frederic Livingstone Mills,	Jamaica, N. Y.,	40 S Ed
John James Moment,	Orono, Ont.,	3 W B
Harry Morgan Moore,	California, Mo.,	9 S M R
Minot Canfield Morgan,	New York City,	17 M D
Roland Sletor Morris,	San Rafael, Cal.,	6 & 7 U
Frederick Pooley Mudge,	Princeton, N. J.,	16 Stockton St.
William Henry Musser,	Harrisburg, Pa.,	10 S Ed
Joseph Laurence Myers,	Princeton, N. J.,	94 Bayard Av.
William Vastine Oglesby,	Danville, Pa.,	36 N Ed
Frank Clifford Okey,	Corning, Ia.,	B, W B
Willette Bronson Orr,	Chambersburg, Pa.,	12 S Ed
Singleton Peabody Outhwaite,	Washington, D. C.,	8 N E
John Rosseel Overton,	Towanda, Pa.,	7 S W
David Park,	Corinth, Miss.,	4 S W
Charles Edgar Patton,	Warriors Mark, Pa.,	39 N Ed
Robert Hunter Patton, 2d,	Princeton, N. J.,	Prospect
Frederic Marshall Paul,	New Brunswick, N. J.,	13 M D
Ralph Barton Perry,	New York City,	79 U
Harry Gordon Pierce,	Wayland, N. Y.,	11 S D
Talbot Eugene Pierce,	Washington, D. C.,	12 E W

David Potter,	Bridgeton, N. J.,	18 N W
John Albert Potter,	Franklin, N. Y.,	19 N E
Stanley Chester Reese,	Pittsburgh, Pa.,	26 S Ed
Joseph Cottrell Righter, Jr.,	Williamsport, Pa.,	48 U
Joseph George Rosengarten, Jr.,	Philadelphia, Pa.,	10 M D
Frederick Tupper Saussy,	Savannah, Ga.,	47 U
John Hinsdale Scheide,	Titusville, Pa.,	14 E W
John Charles Sherriff,	Allegheny City, Pa.,	17 S E
William Duncan Silkworth,	Fishkill, N. Y.,	9 M D
James Dunn Small,	Chicago, Ill.,	8 S E B
Ralph Brown Smith,	Blairsville, Pa.,	12 E B
Francis Sydney Smithers, Jr.,	New York City,	15 E W
William Francis Mattingly Sowers,	Washington, D. C.,	12 E W
Oliver Bennett Sprecher,	Reading, Pa.,	15 N M R
Samuel Robert Spriggs,	Livingston Manor, N. Y.,	16 S Ed
Thomas Henry Atherton Stites,	Wyoming, Pa.,	10 S W B
William LeRoy Stockton,	Princeton, N. J.,	98 Mercer St.
William Paton Thomson,	Altoona, Pa.,	15 S W
Paul Tillinghast,	Englewood, N. J.,	8 E B
Warren Merwin Tower,	Brooklyn, N. Y.,	3 W B
John Moore Trout,	Bridgeville, Del.,	16 S Ed
Edward Bates Turner,	Corning, Ia.,	B, W B
Ralph Ernest Urban,	Tunkhannock, Pa.,	2 S E
Herbert Ure,	Newark, N. J.,	5 N E
Frank Phineas Van Syckel,	Elberon, N. J.,	45 Univ. Pl.
Edward Pierrepont Ward,	Dansville, N. Y.,	6 S E B
Frank Hawley Ward,	Rochester, N. Y.,	6 S E B
Dorr Eugene Warner,	Unionville, O.,	18 N Ed
John Waterhouse,	Honolulu, Hawaiian Is.,	21 S Ed
George Henry Waters,	Peekskill, N. Y.,	8 & 10 N Ed
Leon Joseph Wayave, Jr.,	Corning, N. Y.,	11 N M R
Paul Charles Weed,	St. Paul, Minn.,	7 E M W
Charles Frederick Williams,	Stamford, Conn.,	7 S W
Curtis Moore Willock,	Allegheny, Pa.,	68 Nassau St.
William Rolla Wilson,	Denver, Col.,	19 N W
Charles Wesley Wisner, Jr.,	Baltimore, Md.,	2 S W
Edward Strong Worcester,	Burlington, Vt.,	19 N E
William Jurey Wright,	Lebanon, O.,	15 M D
Philip Walter Yarrow,	Lowell, Mass.,	18 S M R

JUNIORS, ... 149

SOPHOMORE CLASS.

Henry Brown Abbot,	Zanesville, O.,	15 N E
Alexander John Atcheson Alexander,	Spring Station, Ky.,	15 N E
Walter Haskell Andrus,	Williamsport, Pa.,	9 N R
Edward William Axson,	Princeton, N. J.,	48 Steadman St.
Frank Love Baldwin,	Orange, N. J.,	20 E W
Henry Milton Beam,	Intercourse, Pa.,	8 S Ed
Jerome Bradley,	Dobbs Ferry, N. Y.,	84 S Ed
Howard Crosby Brokaw,	New York City,	8 E W
Frederick Walworth Brown,	Manasquan, N. J.,	29 Vandeventer Av.
William Wells Church,	Washington, D. C.,	N, U
Percy Robert Colwell,	Warwick, N. Y.,	18 S Ed
Robert Comin,	New Concord, O.,	9 Wiggins St.
LeRoy Clark Cooley, Jr.,	Poughkeepsie, N. Y.,	27 N Ed
Frank Bertine Cowan,	Hobart, N. Y.,	20 S E
John Hamilton Cowan,	Pittston, Pa.,	9 S Ed
Earl Walker Cox,	Harrisburg, Pa.,	67 U
Roy Galbraith Cox,	Harrisburg, Pa.,	67 U
George Knowles Crozer, Jr.,	Philadelphia, Pa.,	M, U
Frank Grenville Curtis,	New York City,	75 & 76 U
William Potter Davis, Jr.,	Millville, N. J.,	61 U
Walter Moore Dear,	Jersey City, N. J.,	G, U
John Barclay DeCoursey,	Philadelphia, Pa.,	85 U
Irvine Rutherford Dickey,	Oxford, Pa.,	11 E W
Walter Meredith Dickinson,	Trenton, N. J.,	15 W W
John Trumble Downing,	Pittston, Pa.,	14 S M R
Charles Johnson Dunlap,	Watertown, N. Y.,	13 N M R
Everitt Dwight,	Plainfield, N. J.,	14 S D
Edward Graham Elliott,	Murfreesboro, Tenn.,	8 W M W
Seward Erdman,	Morristown, N. J.,	2 S D
Thomas St. Clair Evans,	Blairsville, Pa.,	1 N W
William Fuller Evans,	Greenville, Pa.,	20 W W
John Musser Frame,	Reading, Pa.,	23 William St.
Charles Lamb Furbay,	Short Creek, O.,	3 N Ed
William Miller Gamble,	York, Pa.,	27 William St.
Charles Albert George,	New York City,	2 S M R
Selden Ely Gill,	Philadelphia, Pa.,	50 U
Walter Beatty Gilmore,	Chambersburg, Pa.,	4 S E
Harry James Graham,	Allegheny, Pa.,	68 Nassau St.

John William Graham, Jr.,	Denver, Col.,	15 N W
Albert Brooks Graver,	Oakmont, Pa.,	48 Vandeventer Av.
Julian Arthur Gregory,	East Orange, N. J.,	112 Nassau St.
Archibald Alexander Gulick,	Princeton, N. J.,	26 Mercer St.
John Porter Hall,	Minneapolis, Minn.,	10 N Ed
Robert Lee Hallett,	Milford, Del.,	5 N Ed
John Linton Harkness,	Philadelphia, Pa.,	2 S W B
Herbert Staley Harris,	Rochester, N. Y.,	29 Vandeventer Av.
Walter Stewart Harris,	Minneapolis, Minn.,	2 W W
William Henry,	Princeton, N. J.,	100 Stockton St.
Walton Craig Hill,	Covington, Ky.,	27 Mercer St.
James Morley Hitzrot,	McKeesport, Pa.,	48 Vandeventer Av.
Dwight Ellinwood Hollister,	Rutherford, N. J.,	1 U
William S. Holmes,	Freehold, N. J.,	36 Univ. Pl.
Augustine Minshall Hopper,	Baltimore, Md.,	4 E M W
George Howe, Jr.,	Columbia, S. C.,	48 Steadman St.
Paul Hurst,	Washington, D. C.,	4 S E B
John Gere Jayne,	Berwick, Pa.,	2 E M W
Frederick Nevins Jessup,	Beirut, Syria,	18 S Ed
Willard Parker Jessup,	Goshen, N. Y.,	25 S Ed
John Henry Keener,	Harrisburg, Pa.,	5 N Ed
George Harrington Kelly,	East Liverpool, O.,	12 N E
Francis Adonyah Lane,	Franklin, O.,	148 Nassau St.
Arthur Willis Leonard,	Cincinnati, O.,	12 N D
William Heberton Liggett,	Cedar Knoll, Pa.,	5 S Ed
Edwin Augustus McAlpin, Jr.,	Sing Sing, N. Y.,	35 U
James McClure,	Pittsburgh, Pa.,	1 S E
William Allen McLaughlin,	Vineland, N. J.,	26 N Ed
David Magie, Jr.,	New York City,	33 Prospect Av.
Henry Everitt Mattison,	Brooklyn, N. Y.,	6 N R
Burton Rockwood Miller,	Philadelphia, Pa.,	4 S R
Lucius Hopkins Miller,	Roselle, N. J.,	2 E B
Richard Levin Mitchell,	Wilmington, Del.,	20 W W
Victor Philip Mravlag,	Elizabeth, N. J.,	H, U
Daniel Edward Nevin,	Pittsburgh, Pa.,	35 S Ed
John Henry Nichols,	Delhi, N. Y.,	30 S Ed
Herschel Augustus Norris,	Woodstown, N. J.,	66 U
Henry Chapman Olcott,	New York City,	5 N E
Horace Greeley Padgett,	Owego, N. Y.,	35 N Ed

Samuel Morrow Palmer,	Philadelphia, Pa.,	T, U
Ariovistus Pardee,	Germantown, Pa.,	9 S W
Austin McDowell Patterson,	Xenia, O.,	33 S Ed
True Perkins,	Cleveland, O.,	10 S E
Farrand Baker Pierson,	Philadelphia, Pa.,	E, E B
Wilfred McIlvaine Post,	Beirut, Syria,	17 S Ed
William Boyd Ramsey,	Belle Centre, O.,	28 S Ed
Harry Norman Reeves,	Montclair, N. J.,	5 N M R
Theodore Fairbanks Reynolds,	East Orange, N. J.,	14 S D
Will Ayres Reynolds,	Atlantic City, N. J.,	62 Canal St.
Charles Gorman Richards,	Pittston, Pa.,	9 S Ed
William Moody Robb,	Amsterdam, N. Y.,	8 S W B
Charles Kirkland Roys,	Lyons, N. Y.,	4 S W
James Wood Rusling,	Trenton, N. J.,	5 W W
Henry Norris Russell,	Oyster Bay, N. Y.,	79 Canal St.
Edwin Howard Scott,	White Haven, Pa.,	6 N M R
Walter Allen Seymour,	New York City,	10 W M W
Frederick van Vliet Shaw,	Finderne, N. J.,	88 Nassau St.
Leander Howard Shearer,	New York City,	80 N Ed
William Headley Smith,	Newark, N. J.,	7 S E
James Smitham,	Nesquehoning, Pa.,	28 Edwards Pl.
Nathan Smith Smyser,	Ft. Wayne, Ind.,	6 N R
Richard Briggs Smyth,	Charleston, S. C.,	112 Nassau St.
Selden Spencer,	St. Louis, Mo.,	112 Nassau St.
Nicholas Stahl,	Scranton, Pa.,	8 N E
Edwin McMaster Stanton,	Philadelphia, Pa.,	240 Nassau St.
Robert Fulton Sterling,	Blairsville, Pa.,	4 N W
William Adams Walker Stewart,	New York City,	21 Prospect Av.
Henry Ford Stockwell,	Hammonton, N. J.,	66 U
Hervey Studdiford,	Trenton, N. J.,	8 S W
Frederick Sturges, Jr.,	New York City,	18 W W
Frank Delaney Taggart,	Parkesburg, Pa.,	32 S Ed
Charles Irving Taylor,	Waterbury, Conn.,	24 S Ed
Benjamin Harvey Thompson,	Pittsburgh, Pa.,	1 W M W
Edward Cameron Thompson,	Goshen, N. Y.,	4 S Ed
Samuel Huston Thompson, Jr.,	New Brighton, Pa.,	12 W B
Ernest Ely Turney,	Grand Rapids, O.,	39 S Ed
Albert Clinton Tyler,	Wyoming, O.,	31 N Ed
Harry Van Cleaf,	Hightstown, N. J.,	36 S Ed

Harry Barnes von Krug,	Kingston, Pa.,	19 S M R
John Talbot Ward,	Highlands, Col.,	28 N Ed
George Shadford Waterhouse,	Honolulu, Hawaiian Is.,	21 S Ed
Julius Pierson Wheeler,	Montclair, N. J.,	D, W B
Ephraim Williams, Jr.,	Stonington, Conn.,	11 E B
John Adams Williams,	Nescopeck, Pa.,	88 S Ed
Percy Herbert Williams,	New York City,	6 N E
John Flemming Wilson,	Portland, Or.,	82 Mercer St
Wayne MacVeagh Wilson,	Philadelphia, Pa.,	5 W M W
Frank Montgomery Wood, Jr.,	Fargo, N. D.,	81 N Ed
Allen Stewart Wrenn,	Cincinnati, O.,	42 N Ed
Walter Scott Yeatts,	St. David's, Pa.,	80 & S, U

SOPHOMORES, ... 128

FRESHMAN CLASS.

Frank McGinley Alexander,	Fannettsburg, Pa.,	2 N W
Daniel Fickes Altland,	Dillsbury, Pa.,	19 N Ed
Alfred Edward Alton,	Troy, N. Y.,	28 S Ed
Charles Bradley Andrews,	Zanesville, O.,	4 N R
George Alexander Armstrong,	Newburgh, N. Y.,	28 Chambers St.
William Heath Bannard,	Long Branch, N. J.,	66 Nassau St.
David Boyce Bannerman,	Brooklyn, N. Y.,	33 Chambers St.
William Francis Barret,	Frankfort, Ky.,	15 Dickinson St.
Henry Linn Bassett,	Langhorne, Pa.,	148 Nassau St.
Ward Atlee Batchelor,	Buffalo, N. Y.,	14 N Ed
Louis Pintard Bayard, Jr.,	Short Hills, N. J.,	35 Univ. Pl.
Harry Elijah Belcher,	Newark Valley, N. Y.,	E, E B
Robert Smith Birch,	Reading, Pa.,	23 William St.
John Insley Blair, Jr.,	New York City,	19 Univ. Pl.
George Goodwin Bliss,	Newark Valley, N. Y.,	9 W B
Alexander Russell Bond,	Plainfield, N. J.,	4 N E
John Curtis Borden,	Manasquan, N. J.,	66 Nassau St.
Robert Rankin Boyce,	East Orange, N. J.,	14 N W
Hamilton Boyd,	Fonda, N. Y.,	33 Chambers St.
Ethelbert Ludlow Dudley Breckinridge,	Washington, D. C.,	10 Dickinson St.
Frankland Briggs,	Trenton, N. J.,	31 Canal St.
Hugh Arbuthnot Brown,	Manasquan, N. J.,	29 Vandeventer Av.

Lester Peck Bryant,	Princeton, Ill.,	22 Edwards Pl.
William Hartwell Butterworth,	Watertown, N. Y.,	14 N M R
James Henry Caldwell, Jr.,	Titusville, Pa.,	6 E M W
William Tuttle Carter, Jr.,	Newark, N. J.,	14 N W
John Woolman Churchman,	Burlington, N. J.,	24 Chambers St.
Edgar Marvin Clark,	Philadelphia, Pa.,	19 W W
Junius Paul Clark,	Philadelphia, Pa.,	31 Canal St.
Benjamin Coates,	Philadelphia, Pa.,	45 U
Charles Grenville Cole,	Dunmore, Pa.,	28 Chambers St.
Joseph Wardell Conrow,	Long Branch City, N. J.,	8 M D
William Silvanus Covert,	Bloomville, N. Y.,	30 S Ed
Edwin Gordon Crowdis,	N. E. Margaree, N. S.,	2 S Ed
John Wallace Cunningham,	Blairsville, Pa.,	1 S Ed
Gerald Schooley Curtis,	New York City,	75 & 76 U
Robert Hare Davis,	Philadelphia, Pa.,	45 Univ. Pl.
Franklin Woolman D'Olier,	Burlington, N. J.,	24 Chambers St.
Robert Dunning Dripps,	Savannah, Ga.,	17 S W
Francis Elbert DuBois,	New York City,	11 Dickinson St.
Arthur Read Elmer,	Trenton, N. J.,	4 S M R
Frank Nelson Emerson,	Peoria, Ill.,	88 Nassau St.
Howard Crosby Foster,	New York City,	11 Dickinson St.
Elmer Ewing Green, Jr.,	Trenton, N. J.,	10 Dickinson St.
Henry Harrison Hadley, Jr.,	New York City,	33 Vandeventer Av.
Charles Harrison Hale,	Columbus, Miss.,	166 Nassau St.
Charles Woodruff Halsey,	Mt. Vernon, N. Y.,	11 Dickinson St.
Albert Wintermute Harris,	Newark, N. J.,	12 Vandeventer Av.
Harry Wilde Harris,	East Orange, N. J.,	14 Edwards Pl.
Andrew Edward Harvey,	Detroit, Mich.,	215 Nassau St.
William Elias Hedges,	Chicago, Ill.,	14 Edwards Pl.
Ralph Woods Hench,	Harrisburg, Pa.,	23 N Ed
Russell Howland,	Newark, N. J.,	24 Chambers St.
Elliott Mason Irvine,	Yonkers, N. Y.,	28 Chambers St.
Oliver Wolcott Jackson,	Newark, N. J.,	36 Univ. Pl.
Edward Rutter James,	Ashley, Pa.,	29 N Ed
Frederic Leopold Johnson,	Newark, N. J.,	21 Chambers St.
George White Johnson,	Hackensack, N. J.,	12 Dickinson St.
George Basye Kennedy,	Pittsburgh, Pa.,	B, U
Fred Mason Kinne,	Paterson, N. J.,	12 Dickinson St.
James Hanna Kurtz,	New Castle, Pa.,	36 Univ. Pl.

Nicholas Frederick Lenssen, New York City, 15 Univ. Pl.
Burt Hayes Leonard, Beaver, Pa., 16 N E
Robert Edmonds Little, Richmond, Ky., 45 Univ. Pl.
Stacy Barcroft Lloyd, Philadelphia, Pa., 9 E W
Matthew Lowrie, Warriorsmark, Pa., 17 S W
William Frank McCombs, Hamburg, Ark., 9 S M R
Charles Lester McCoy, Peoria, Ill., 88 Nassau St.
Herbert McDermott, Chattanooga, Tenn., 215 Nassau St.
James Wilson Mack, Indiana, Pa., 7 S M R
Robert McKelvy, Titusville, Pa., 6 E M W
Thomas Goodman McWilliams, Chicago, Ill., 15 Univ. Pl.
Wurtele Marston, New York City, 78 Univ. Pl.
Harry Oliver Martin, Mifflintown, Pa., 15 Canal St.
Paul Curtis Martin, Springfield, O., 148 Nassau St.
William Mather, Utica, N. Y., 44 U
Louis Burchfield Milliken, Warble, Pa., 15 Canal St.
Springer Harbaugh Moore, Sewickley, Pa., 39 Nassau St.
Clifford Abbott Morton, New Egypt, N. J., 138 Nassau St.
Harold Bond Nason, Philadelphia, Pa., 112 Nassau St.
Alexander Neill, Jr., Hagerstown, Md., A, U
Craig Elder Nightingale, New York City, 28 Chambers St.
John Gordon Noakes, Scranton, Pa., 24 Edwards Pl.
Percy Elliot North, Carbondale, Ill., 14 Edwards Pl.
Harrington Spear Paine, New York City, 81 Univ. Pl.
Harry Parsons, Williamsport, Pa., 15 Dickinson St.
John Macmillan Stevenson Patton, Princeton, N. J., Prospect
William Black Pell, New York City, 258 Mercer St.
Ezra Parmelee Prentice, New York City, 60 Univ. Pl.
Walter Powell Redington, Washington, D. C., 19 Vandeventer Av.
Carl Seward Reed, Monticello, Ill., 29 Vandeventer Av.
George Griffiths Reichner, Philadelphia, Pa., C, U
Howard Roland Reiter, Philadelphia, Pa., 26 N Ed
Frederick Lot Ridgway, Cream Ridge, N. J., 138 Nassau St.
Philip Ely Robinson, Sewickley, Pa., 15 Univ. Pl.
John Henry Rodney, Jr., New Castle, Del., 36 Univ. Pl.
Addison Priest Rosenkrans, Newton, N. J., 29 Vandeventer Av.
Nathan Southwick Schroeder, Brooklyn, N. Y., 11 Dickinson St.
John Matthew Scott, Frankfort, Ky., 15 Dickinson St.
Edmund Bayly Seymour, Jr., Germantown, Pa., 144 Nassau St.

Joseph Roy Showalter,	Oxford, Pa.,	33 Vandeventer Av.
Harry Britt Slocum,	Long Branch, N. J.,	32 Vandeventer Av.
George Vivian Smith,	Lakewood, N. J.,	2 S M R
Leon Stein,	Newark, N. J.,	29 Vandeventer Av.
Walter Carleton Sterling,	Wilkes Barre, Pa.,	68 Univ. Pl.
Henry Mears Stevenson,	Philadelphia, Pa.,	8 Dickinson St.
Thomas Kirkbride Sturdevant,	Wilkes Barre, Pa.,	68 Univ. Pl.
James Franklin Supplee, Jr.,	Baltimore, Md.,	33 Chambers St.
Frederick Judson Sutton,	New York City,	10 S W
Joseph Simon Thomas,	Dunellen, N. J.,	12 Vandeventer Av.
Walter Thomas,	Milford, Del.,	1 N Ed
Samuel Garver Thomson,	Altoona, Pa.,	15 S W
Frank Simms Troutman,	Eminence, Ky.,	24 Edwards Pl.
Henry Vanderbilt Tulloch,	Washington, D. C.,	17 U
Wynant Davis Vanderpool,	Morristown, N. J.,	31 Univ. Pl.
Harry Budd Van Dusen,	Cranbury, N. J.,	64 Univ. Pl.
Lewis Harlow Van Dusen,	Philadelphia, Pa.,	47 Univ. Pl.
James Edward Van Dyke,	Stockton, N. J.,	A. E B
Joseph Smith Van Dyke, Jr.,	Cranbury, N. J.,	64 Univ. Pl.
Leslie Perry Ward,	Newark, N. J.,	31 Univ. Pl.
Frank Keely Watson,	Aldine, N. J.,	28 Chambers St.
James Cummin Watson,	Williamsport, Pa.,	45 Univ. Pl.
Benjamin Remington Weld,	Minneapolis, Minn.,	45 Univ. Pl.
Harold Bertrand Wells,	Pemberton, N. J.,	64 Univ. Pl.
Albert Payson Williams, Jr.,	Frenchtown, N. J.,	3 S E
Meade Tyrrell Williams,	St. Louis, Mo.,	60 Univ. Pl.
Alexander Witherspoon,	Louisville, Ky.,	45 Univ. Pl.
Harvey Lee Wyatt,	Wilmington, Del.,	20 S W
Howard Herr Yocum,	Columbia, Pa.,	27 Chambers St.
John Lafon Young,	Newark, N. J.,	78 Univ. Pl.

FRESHMEN, ... 130

SPECIAL STUDENTS.

NOT CANDIDATES FOR A DEGREE.

Harry William Bloch,	Philadelphia, Pa.,	21 S Ed
Milner Brien,	Dayton, O.,	8 W W
Percy Adelbert Caldwell,	Chattanooga, Tenn.,	33 Vandeventer Av.

Samuel Clay,	Paris, Ky.,	25 M D
Clarence Porter Cowles,	Albany, Vt.,	87 S Ed
Josiah Hughes Crawford,	Philadelphia, Pa.,	1 N E
Frank Linley Critchlow,	East Northfield, Mass.,	163 Nassau St.
Ralph Seltzer Dilley,	Philadelphia, Pa.,	7 E B
Seth Russell Downie,	Harrisburg, Pa.,	82 N Ed
Truston Polk Drake,	Yalaha, Fla.,	1 E W
Anthony Henderson Euwer,	Ben Avon, Pa.,	9 Park St.
Frank Edgar Evans,	Milwaukee, Wis.,	9 Park St.
Leon Barnesconia Fish,	Hancock, N. Y.,	27 William St.
Alexander Robert Fordyce, Jr.,	Newark, N. J.,	8 S E B
Edgar Halliday,	Brooklyn, N. Y.,	32 Vandeventer Av.
Alan Campbell Harris,	Philadelphia, Pa.	24 Dickinson St.
James Hayes, Jr.,	Plainfield, N. J.,	27 Mercer St.
Sharon P. Heilman,	Kitanning, Pa.,	9 N M R
Stephen Alexander Hodge,	Wilkes Barre, Pa.,	10 S D
James Collins Holmes,	Danville, Ky.,	2 Nassau St.
William Henry Hoole,	Buffalo, N. Y.,	14 N Ed
Nejib Ibrahim Angelo Katibah,	Damascus, Syria,	11 Vandeventer Av.
William Noble Keller,	Council Bluffs, Ia.,	12 N E
Arthur March Kennedy,	Philadelphia, Pa.,	76 Univ. Pl.
Francis Marschalk Kip, Jr.,	Harlingen, N. J.,	16 Witherspoon St.
Robert Ogilvie Kirkwood,	Yonkers, N. Y.,	2 N Ed
Francis Charles McDonald,	Mt. Union, Pa.,	16 S M R
Walter Peter McGibbon, Jr.,	Edinborough, Pa.,	20 S E
Frederic Hinton Maule,	Philadelphia, Pa.,	41 Univ. Pl.
Morris Henry Moyer,	Orwigsburgh, Pa.,	78 Univ. Pl.
George Williams Peck, Jr.,	Roselle, N. J.,	5 N R
Oscar Bertram Riegel,	Orwigsburgh, Pa.,	28 Edwards Pl.
George Barcley Rives,	New York City,	10 E M W
James Harvey Scott,	Pittsburgh, Pa.,	1 W W
Latimer Painter Smith,	Philadelphia, Pa.,	15 Univ. Pl.
Holmer Clay Snitcher,	Greenwich, N. J.,	18 S W
Charles Dunbar Trumbull,	Kansas City, Mo.,	4 S E B
Walter Monroe Weiss,	New York. N. Y.,	18 U
Maurice Johnson Winfield,	Logansport, Ind.,	16 N W
Charles Ladd Woodburn,	Towanda, Pa.,	6 S R

ACADEMIC SPECIALS, ... 40

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STUDENTS IN THE JOHN C. GREEN SCHOOL OF SCIENCE.

SCHOOL OF ELECTRICAL ENGINEERING.

Second Year.

Harold McKnight Beck,	Germantown, Pa.,	6 W B
James Drake Black, A.B., Princeton, 1893.	New York City,	6 S E
Frank Leonard Kellogg,	Orange, N. J.,	5 M D
Howard McClenahan,	Port Deposit, Md.,	2 W M W
George Macloskie, Jr., C.E., Princeton, 1893.	Princeton, N. J., 239 Nassau St.	
James Ditmars Remsen,	Brooklyn, N. Y., 75 Prospect Av.	
Will Spoor Rogers,	Omaha, Neb.,	5 N D
William Corbit Spruance, Jr.,	Wilmington, Del.,	5 M D
George Randall Swain,	Newark, N. J.,	6 N D
George Clarence Wintringer,	Steubenville, O.,	2 W M W

First Year.

Frederick Warner Allen,	South Orange, N. J.,	9 E M W
John Crosby Neely, A.B., Princeton, 1894.	Chicago, Ill.,	18 S D

STUDENTS IN THE ELECTRICAL SCHOOL, . . . 12

SENIOR CLASS.

a Ralph Waldo Bailey,	Elizabeth, N. J.,	20 M D
a Theodorus Bailey,	New York City,	16 S W
e George Fisher Barton,	Jersey City, N. J., 27 Vandeventer Av.	

a Henry Hervey Brady, Jr.,	Chesapeake City, Md.,	4 W M W
a John Hubert Brooks,	Scranton, Pa.,	8 S W B
a Walter Milton Buckingham,	Longmont, Col.,	24 Mercer St.
a Henry Mathews Canby,	Wilmington, Del.,	2 W B
a Rhodes Clay,	Mexico, Mo.,	8 S W
a Howard Augustus Colby,	New York City,	2 M D
a Harden Lake Crawford,	New York City,	4 W M W
e Carleton Curtis,	New York City,	5 S W
a James Windsor Decker,	Scranton, Pa.,	15 S D
a Howard De Forest,	New York City,	17 E W
a Gail Ayers Dray,	Chicago, Ill.,	5 E M W
a Victor Edgar Egbert,	Pittsburgh, Pa.,	9 N E
a Macomb Kean Elmer,	Bridgeton, N. J.,	4 N M R
a Jesse Howard Fry,	Rochester, Pa.,	1 S R
a Theodore Fossit Furness,	Philadelphia, Pa.,	70 & 71 U
a Horatio Whitridge Garrett,	Baltimore, Md.,	8 Stockton St.
a John Work Garrett,	Baltimore, Md.,	8 Stockton St.
e Joseph Douglas Green,	Syracuse, N. Y.,	15 S D
a Charles Lee Hamilton,	Pittsburgh, Pa.,	F, W B
e James Edward Hayes, Jr.,	Brooklyn, N. Y.,	8 E M W
e William Frederick Hencken,	New York City,	9 N W
a Joseph Jessup,	Woodbury, N. J.,	1 S E B
e Charles Kellerman,	McKee's Rocks, Pa.,	29 S Ed
a Richard Chambers Kumler,	A.B., Dayton, O.,	22 M D
a Edwin Snow La Fetra,	Washington, D. C.,	1 E B
a Charles Henry Leeds,	Stamford, Conn.,	4 M D
e Edward McCormick,	Germantown, Pa.,	6 W B
a Walter Moses,	Trenton, N. J.,	3 S R
a Edward Munn,	East Orange, N. J.,	17 & 18 W W
e Courtland Nixon,	Belle Meade, N. J.,	78 U
e Frederick Albert Norris,	New York City,	4 W W
a Anderson Offutt,	Rockville, Md.,	5 N W
a Orrel Ardrey Parker,	Fostoria, O.,	18 S M R
e James Donaldson Paxton,	Princeton, N. J.,	20 Steadman St.
e James Wilson Paxton, Jr.,	Philadelphia, Pa.,	20 Steadman St.
e Thomas Haines Pierson,	Summit, N. J.,	10 S D
e Charles Arthur Poole,	Rochester, N. Y.,	P, U
e Frank Reynolds,	Maquoketa, Ia.,	78 U
a Lynn Ryerson Rutter,	Chicago, Ill.,	11 W B

e Arthur William Schumacher,	Los Angeles, Cal.,	5 W	W
a Archer Whitney Seaver,	Philadelphia, Pa.,	2 W	B
e Thomas Slidell,	Princeton, N. J., 74 Bayard Av.		
a Knox Taylor,	Bound Brook, N. J.,	19 E	W
e William Henry Wells,	Jersey City, N. J.,	23 S	Ed
e Daniel Parvin Westcott,	Cramer Hill, N. J.,	34 N	Ed

SENIORS, ... 48

JUNIOR CLASS.

e Sylvester Halsey Moore Agens,	Newark, N. J.,	6 E	B
e George Klotz Allen, Jr.,	Red Bank, N. J.,	2 E	W
a Hugh Wilson Barnett,	Springfield, O.,	10 N	W
a Henry Hannah Bergen,	Brooklyn, N. Y.,	6 E M	W
e George Glover Blackmore,	Cincinnati, O.,	7 N	W
e Edgar Thomas Blackwell,	Hopewell, N. J.,	88 Nassau St.	
e Parker Johnson Boice,	Indianapolis, Ind.,	42 Nassau St.	
e Arthur Houston Brown,	Polk, Ia.,	37 S	Ed
e William Bush,	Wilmington, Del.,	5 S W	B
a Roderick Byington, Jr.,	Brooklyn, N. Y.,	14 S	E
a Walter Chandler, Jr.,	Elizabeth, N. J.,	17 & 18	U
a Logan Coleman,	Springfield, Ill.,	41	U
e Henry Haines Cross,	Mt. Holly, N. J.,	9 S	R
a George Goodwin Dewey,	Portsmouth, N. H.,	18 M	D
e Henry Street Dickerman,	Springfield, Ill.,	72	U
a William Sutton Dickson,	Pittsburgh, Pa.,	68 & 69	U
e James Henry Emlen,	Trenton, N. J.,	58 John St.	
a Emory Leyden Ford,	Allegheny, Pa.,	12 N	W
e Daniel Rouse Bower Glenn,	Princeton, N. J., 15 Dickinson St.		
a Charles Henry Grant,	Summit, N. J.,	8 E	B
e William Hagar,	St. Louis, Mo.,	15 N	D
e John Hanlon,	Brooklyn, N. Y., 81 Vandeventer Av.		
a William Prettyman Hearn,	Philadelphia, Pa.,	2 S	E
e Christian Stanger Heritage,	Glassboro, N. J.,	8 S E	B
a Isaac Smith Homans,	Englewood, N. J.,	19	U
e Alfred Bloomfield Jones,	Mt. Holly, N. J.,	7 N M	R
a Percy Ogden Judson,	East Arlington, Vt.,	2	U
e Jacob Kahn,	New York City,	6 E	B
e John Douglas Kilpatrick,	Baltimore, Md.,	7 E M	W

e Kenneth Raleigh Kingsbury,	East Orange, N. J.,	12 M	D
a Edwin Edward Kurtzeborn,	St. Louis, Mo.,	88	U
a Frederick Curwen Leas,	Philadelphia, Pa.,	8 N	R
e Thomas Dimock Leonard,	Syracuse, N. Y.,	O,	U
a Welding Dennis Libbey,	Chicago, Ill.,	64 & 65	U
e William Thomas Lyle,	Newark, N. J.,	5 S	E
a George Wood Lyon,	Bridgeton, N. J.,	4 N	E
e John Evans McLain,	Johnstown, Pa.,	1 W M	W
e Egbert Shepard Marsh,	Bridgeport, Conn.,	1 N M	R
a Charles Ingalls Marvin,	Germantown, Pa.,	12 S E	B
e William Galbraith Mitchell,	Washington, D. C.,	1 E M	W
a Harold Byron Northrup,	Johnstown, N. Y.,	14 S	E
a Frederick Dalton Parker,	Fostoria, O.,	13 S M	R
a William Bowne Parsons,	Flushing, N. Y.,	10 N M	R
a Arthur Edmund Pew,	Pittsburgh, Pa.,	8 S	R
e Gaston Pearson Philip,	Washington, D. C.,	1 E M	W
a William Woodburn Potter,	Philadelphia, Pa.,	5 W	B
e William Belden Reed, Jr.,	New York City,	8 M	D
a Algernon Brooke Roberts,	Bala, Pa.,	5 W	B
a Robert Sinclaire Rodgers,	Springfield, O.,	10 N	W
a Henry Welsh Rogers,	Philadelphia, Pa.,	E,	U
e George Rosengarten Sinnickson,	Philadelphia, Pa.,	14 & 15	U
e Lloyd Llewellyn Smith,	Asbury, N. J.,	13 N	E
a Ralph Dusenbury Smith,	Binghamton, N. Y.,	18 E	W
e Francis Gray Stewart,	New York City,	21 Prospect	Av.
e Archibald Alexander Talmage,	St. Louis, Mo.,	6 W M	W
a George Dawes Van Arsdale,	Newark, N. J.,	13 S	E
a Arthur Ledlie Wheeler,	Philadelphia, Pa.,	7 S	D
a Charles Hallock Whitehead,	Kansas City, Mo.,	6 S	W
a Arthur Edward Winter,	Orange, N. J.,	64 & 65	U

JUNIORS, ... 59

SOPHOMORE CLASS.

a Hugh Claiborne Adams,	Webster Groves, Mo.,	144 Nassau	St.
e Calvin Tomkins Allison,	Stony Point, N. Y.,	20 S	W
a Owen Randolph Altman,	California, Pa.,	9 N	Ed
a Harry Vanderburgh Babcock,	New York City,	64 Univ.	Pl.
a Edward Duff Balken,	Pittsburgh, Pa.,	6 S W	B
a Henderson Barkley,	New Orleans, La.,	7 W M	W

a	Paul Bedford,	Wilkes Barre, Pa.,	7 E W
e	Henry Conklin Bissell,	Pennington, N. J.,	22 Dickinson St.
a	Fenimore Lewis Bodman,	Peoria, Ill.,	88 Nassau St.
a	Dudley Phelps Bonnell,	Grand Rapids, Mich.,	9 U
a	Burdette Leon Bowne,	Grand Rapids, Mich.,	10 U
e	Oscar Irwin Brown,	New York City,	7 N R
a	Carl Emerson Buckingham,	Longmont, Col.,	24 Mercer St.
e	Robert Stuart Campbell,	Lancaster, Pa.,	23 N Ed
e	John Simmons Collette,	Binghamton, N. Y.,	18 N M R
e	David Mahon Craig,	Washington, D. C.,	5 S W B
e	Edward Parsons Davis,	Falmouth, Mass.,	25 Chambers St.
e	John De Gray,	Hawthorne, N. J.,	8 M D
a	Evaristo Visente de Montalvo,	New York City,	25 Chambers St.
e	Ralph Derr,	Wilkes Barre, Pa.,	8 W B
e	John Dean Elliott,	Allegheny City, Pa.,	42 U
e	Walter Shipman Ely,	Peekskill, N. Y.,	5 E M W
e	Frank Warner Emmons,	Washington, D. C.,	10 N R
e	Frank Evans,	Blairsville, Pa.,	1 N W
a	George Ostrum Forbes,	Rockford, Ill.,	2 E B
a	Harvey Thompson Frazer,	Newark, N. J.,	14 S Ed
a	Robert Garrett, Jr.,	Baltimore, Md.,	8 Stockton St.
a	Nelson William Gillespie,	Scranton, Pa.,	1 U
e	John Leigh Green,	St. Louis, Mo.,	9 S W B
e	Henry Alexander Harris,	Princeton, N. J.,	256 Nassau St.
a	William Elliott Harrold,	Americus, Ga.,	22 Stockton St.
a	Francis Reynolds Hausseling,	Newark, N. J.,	6 N D
e	George Thorne Hill, Jr.,	New York City,	13 U
e	John Harrison Hutchinson,	Georgetown, N. J.,	39 Nassau St.
e	Thomas Hall Ingham,	Philadelphia, Pa.,	9 E M W
a	Albert Woodward Jamison,	Peoria, Ill.,	27 M D
a	Herbert Brotherson Jamison,	Peoria, Ill.,	27 M D
e	Phillips Jones,	Newark, N. J.,	4 W B
a	John Mumford Keese,	Courtlandt, N. Y.,	19 S E
e	Henry Neff Kehler, Jr.,	Columbia, Pa.,	8 S W B
a	Edward Gruet Kent,	East Orange, N. J.,	N, U
a	Carlton Montgomery Kershow,	Philadelphia, Pa.,	16 E W
a	Samuel Victor King,	Allegheny, Pa.,	12 S W B
e	William White Knapp,	Peekskill, N. Y.,	5 E M W
e	William Wallace Leggett,	Princeton, N. J.,	87 William St.
e	Harry Wells Leigh,	Princeton, N. J.,	186 Nassau St.

e Robert Theodore Leipold,	Washington, D. C.,	15 S	E
e George Green Lewis,	Trenton, N. J.,	6 W	W
a Henry Wheeler Lowe,	Plainfield, N. J.,	15 Dickinson	St.
a William Henry McCartney,	Wilkes Barre, Pa.,	78 Univ.	Pl.
a Malcolm Macdonald, Jr.,	Princeton, N. J.,	245 Nassau	St.
a Roderick Lachlan Macleay,	Portland, Ore.,	5 M	D
a Frederic Brownell McNish,	Cambridge, N. Y.,	14 S	D
a James Henry Masson, Jr.,	Mobile, Ala.,	15 S	D
e Edwin Moore,	Moore, Pa.,	9 W	B
a Robert Moore,	Pittsburgh, Pa.,	17 S	E
e William Joseph Parker,	Trenton, N. J.,	39 Nassau	St.
a Walter James Pilling,	Washington, D. C.,	11 W	W
e Robert Pitcairn, Jr.,	Pittsburgh, Pa.,	6 S W	B
e Neilson Poe, Jr.,	Baltimore, Md.,	5 W M	W
e John Reilly, Jr.,	Philadelphia, Pa.,	3 S	D
a James Mauran Rhodes, Jr.,	Ardmore, Pa.,	16 W	W
a Thomas Dudley Riggs,	Baltimore, Md.,	7 W M	W
a Harry Curtis Robb,	Newark, N. J.,	13 S	E
a Irving Livingston Roe,	New York City,	25 E	B
a Albert Huntsman Rosengarten,	Philadelphia, Pa.,	60	U
e Joseph Wright Ryle,	Paterson, N. J.,	30	U
e Ira Allan Sankey,	Brooklyn, N. Y.,	14 S	W
a Joseph Sawyer, Jr.,	Stamford, Conn.,	1 S	W
e Robert Dalzell Schoonmaker,	Plainfield, N. J.,	68 & 69	U
a Clarence Mills Seymour,	Holyoke, Mass.,	14 Vandeventer	Av.
a Edwin Shortz, Jr.,	Wilkes Barre, Pa.,	88 Nassau	St.
a William Weeks Silvey,	New York City,	10 S	D
a Samuel Small, Jr.,	York, Pa.,	16	U
e Frederick Lorenze Smith,	New York City,	9 N	Ed
a Joseph Morgan Smith,	Grand Rapids, Mich.,	A,	U
a Charles Edward Speer, Jr.,	Pittsburgh, Pa.,	35 Univ.	Pl.
e Sydney Wentworth Taylor, Jr.,	Fort Riley, Kan.,	24 Chambers	St.
a Leland Burr Terry,	Randolph, N. Y.,	8 N	R
a John Myers Townley,	Kansas City, Mo.,	12 E	B
a William Booth Trainer,	Chester, Pa.,	8 S W	B
e John Stout Van Nest,	Trenton, N. J.,	7 N	E
a Henry .Waterhouse, Jr.,	Honolulu, Hawaiian Islands,	2 N	E
e Robert Crew Wilkins,	Washington, D. C.,	10 N	R
e Walker Winfield Wilson,	Clarion, Pa.,	8 W M	W
e Herbert Roland Woodward,	Peoria, Ill.,	24 Chambers	St.

SOPHOMORES, ... 86

FRESHMAN CLASS.

e Thomas Archibald Aiton, Washington, D. C., 45 Vandeventer Av.
e William Jules Aman, Washington, D. C., 138 Nassau St.
a Houston Churchwell Armstrong, Selma, Ala., 11 N E
a Matthew Baird, Merion Sta., Pa., 85 Univ. Pl.
a George Minthorne Bennett, Monticello, N. Y., 75 Prospect Av.
a Ralph Waldo Beymer, Corning, Ia., 4 N Ed
a Moses Bigelow, Jr., Newark, N. J., 86 Univ. Pl.
e George Harold Bouton, Jersey City, N. J., 19 Vandeventer Av.
e Edward Allen Breck, Pittsburgh, Pa., 9 Park St.
e Robert Stewart Brooks, Paterson, N. J., 76 Univ. Pl.
a George Elsworth Brower, Brooklyn, N. Y., 9 N D
e Clarence Hubbard Brush, Philadelphia, Pa., 49 Univ. Pl.
a Thomas Townsend Buckley, New York City, 25 Stockton St.
e Castle Douglas Burt, Brooklyn, N. Y., 24 Chambers St.
e Chauncey Howard Burt, Plainfield, N. J., 12 Vandeventer Av.
a George Howard Butler, Brooklyn, N. Y., 168 Nassau St.
a Williams Biddle Cadwalader, Philadelphia, Pa., 19 M D
e Stewart Fellowes Campbell, Glen Ridge, N. J., 2 Witherspoon St.
e Harold Whitney Canning, Wilmington, Del., 81 Univ. Pl.
a Arthur Fletcher Cassels, Washington, D. C., 8 N E
a Dwight Hukill Coble, Steubenville, O., 7 S Ed
e Garrett Cochran, Williamsport, Pa., 15 Dickinson St.
e William Douglass Collins, St. Louis, Mo., 84 Vandeventer Av.
e Albert Emerson Comstock, White Plains, N. Y., 78 Univ. Pl.
a Wilbur Halstead Condon, Oswego, Kan., 206 Nassau St.
e William Leigh Cook, Princeton, N. J., 192 Nassau St.
a Edward Payson Cooke, Paterson, N. J., 11 Dickinson St.
a Oakley Watts Cooke, Paterson, N. J., 11 Dickinson St.
a Roy Cummings Cooper, Allegheny, Pa., 14 Vandeventer Av.
e John Hall Deane, Jr., New York City, 138 Nassau St.
e Eugene Theodore DeWitt, Deckertown, N. J., 27 William St.
a Wallace DeWitt, Fort Leavenworth, Kan., 31 Steadman St.
e Ralph Vance Dickerman, Springfield, Ill., 72 U
a Philemon Dickinson, Trenton, N. J., 31 Canal St.
a Bertrand Francis Drake, Yalaha, Fla., D, U
e John Thomas Dunlop, Washington, D. C., 48 Vandeventer Av.

e Ernest Rickeard Dunn, Philadelphia, Pa., 47 Univ. Pl.
e Roswell Francis Easton, Princeton, N. J., 47 Univ. Pl.
e John Orville Ecker, Washington, D. C., 76 Univ. Pl.
a Myron Whitney Farlin, Chicago, Ill., 41 Univ. Pl.
a Theodore Weems Forbes, Baltimore, Md., 66 Nassau St.
a Holton Wesley Garner, Ottumwa, Ia., 23 Edwards Pl.
e Charles Sutter Gaskill, Mt. Holly, N. J., 7 S E B
e Guy Beall Gilmore, Uniontown, Pa., 19 S W
e Robert Galt Goldsborough, Baltimore, Md., 2 Witherspoon St.
e John Edgar Graham, Cambridge, Mass., 34 U
e Ferdinand Johnson Graves, Germantown, Pa., 31 Univ. Pl.
e Harry Westervelt Gregg, East Orange, N. J., 31 Univ. Pl.
a Franz Carl Groos, San Antonio, Tex., 11 W B
a Richard George Hager, St. Louis, Mo., 15 N D
e Harrison Hall, Dayton, O., 18 N W
e Harry Maybin Hart, Philadelphia, Pa., 39 Nassau St.
e Sterling Paine Hayward, Yonkers, N. Y., 61 U
e Edward Creswell Heald, Washington, D. C., 5 S B
a Walter Richmond Herrick, Albany, N. Y., 67 Prospect Av.
a James Rowland Hughes, Richmond, Ind., 206 Nassau St.
e John Updegraff Hussey, Allegheny, Pa., 31 Univ. Pl.
e Joseph Baldwin Hutchinson, Jr., Philadelphia, Pa., 86 Nassau St.
e Richard Howard Jamison, Greensburg, Pa., 27 Chambers St.
e Lawrence Church Jefferson, St. Paul, Minn., 48 Vandeventer Av.
a John Samuel Jessup, Jr., Woodbury, N. J., 1 S E B
e John Johnston, Jr., Chicago, Ill., 34 Vandeventer Av.
e Frank Weyman Kennedy, Allegheny, Pa., 31 Univ. Pl.
e Hutton Kennedy, Philadelphia, Pa., 76 Univ. Pl.
a Robert Burns King, Pittsburgh, Pa., 47 Univ. Pl.
e Lewis Knapp, St. Louis, Mo., 34 Vandeventer Av.
a Levin Dirickson Laning, Petersburg, Ill., 34 Vandeventer Av.
a Francis Cabeen Lea, Philadelphia, Pa., 18 & 19 W W
e Guy Percy Levering, La Fayette, Ind., 11 Dickinson St.
a Milton Floyd Loofbourrow, Mt. Sterling, O., 66 Nassau St.
a Oliver Harriman Low, New York City, 9 S E B
e Walter McClenahan, Port Deposit, Md., 2 W M W
e William Leslie McClure, Allegheny, Pa., 39 Nassau St.

a George Henry McFarland, Jr., Cambridge, N. Y., 1 S R
a Albert Elliott McVitty, Bryn Mawr, Pa., 47 Univ. Pl.
a Edward Quinby McVitty, Bryn Mawr, Pa., 47 Univ. Pl.
a Joseph Dennie Meredith, New York City, D, U
a Clinton Vanderbilt Meserole, Brooklyn, N. Y., 168 Nassau St.
a Oliver Samuel Metzerott, Washington, D. C., 84 Vandeventer Av.
e Robert McDowell Moser, Washington, D. C., 17 U
e Malcolm Stewart Murray, Saltsburg, Pa., 16 S M R
a George McCague Newmyer, Pittsburgh, Pa., 14 Vandeventer Av.
e Fred Pearson Ohl, New Castle, Pa., 8 S M R
e James Caldwell Park, Cranford, N. J., 9 Park St.
a John Reid Parker, Freehold, N. J., 27 William St.
a Edward Franklin Pelton, Brooklyn, N. Y., 33 Vandeventer Av.
e Frank Russel Pitcairn, Harrisburg, Pa., R, U
e Frank DeWitt Pitkin, Yonkers, N. Y., 31 Univ. Pl.
a Theodore Runyon Plume, Newark, N. J., 11 Dickinson St.
a Charles Morgan Post, Brooklyn, N. Y., 165 Nassau St.
a Harry Clay Potter, Jr., Philadelphia, Pa., 40 U
a Frank Ferry Powell, Cincinnati, O., 15 Univ. Pl.
e Seth Jagger Raynor, Southampton, N. Y., 8 Edwards Pl.
e James Lardner Reakirt, Philadelphia, Pa., 148 Nassau St.
e Herbert Jacob Reinmund, Englewood, N. J., 138 Nassau St.
a Charles Carter Renshaw, Boyce, Va., 49 U
e William Rollinson, Orange, N. J., 47 Univ. Pl.
e Lee Moses Rumsey, St. Louis, Mo., 8 N D
a George Wright Schwarzwaelder, Brooklyn, N. Y., 86 Univ. Pl.
e George Cole Scott, Richmond, Va., 86 Univ. Pl.
a Gordon Scott, Wilkes Barre, Pa., 88 Nassau St.
a William McKendree Scott, Allegheny, Pa., 56 Bayard Av.
a Howard Eves Seaver, Philadelphia, Pa., 2 W B
e Lansing Skimmerhorn Seymour, Pittsburgh, Pa., 16 S E
a Archer Coit Sinclair, New York City, 19 Univ. Pl.
e Thomas Julien Skillman, Trenton, N. J., Trenton
e Harold Perry Smith, Nyack, N. Y., 86 Univ. Pl.
a Richard Lawrence Smith, New York City, 2 Witherspoon St.
a William Hair Spurgin, West Point, N. Y., 33 Vandeventer Av.
e Walter Patterson Stewart, Saltsburg, Pa., 16 S M R

Walter Clark Titus,	Trenton, N. J.,	8 S W
Horatio Whitbridge Turnbull,	Baltimore, Md.,	8 Stockton St.
Robertson Sayre Ward,	Newark, N. J.,	24 Chambers St.
Robert Weber,	New York City,	6 W M W
Charles Gordon Wiestling,	Vandalia, Ill.,	164 Nassau St.
Wilburt Charles Williams,	Scranton, Pa.,	9 W W
Jack Ladislas Woldenberg,	Plosk, Poland,	2 Witherspoon St.
Leigh Wyman,	St. Louis, Mo.,	12 N M R

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CLASSIFICATION OF STUDENTS BY RESIDENCE.

Pennsylvania	304	Virginia	3
New Jersey	235	West Virginia	3
New York	198	Florida	2
Ohio	47	Louisiana	2
Illinois	46	Nebraska	2
Maryland	37	Oregon	2
District of Columbia	32	Arkansas	1
Iowa	19	Indian Territory	1
Missouri	17	North Dakota	1
Kentucky	15	New Hampshire	1
Kansas	15	Rhode Island	1
Delaware	12	Wisconsin	1
Indiana	11		
Massachusetts	8	Canada	8
Connecticut	8	Ireland	7
Tennessee	8	Syria	4
Michigan	8	Hawaiian Islands	3
Colorado	6	China	2
Minnesota	5	India	2
Alabama	5	Brazil	1
Georgia	4	England	1
Mississippi	4	Japan	1
California	3	Persia	1
South Carolina	3	Poland	1
Texas	3	Scotland	1
Vermont	2	Turkey	1

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ABBREVIATIONS.

N, Nassau Hall.
N E, North Entry of East College.
S E, South Entry of East College.
N W, North Entry of West College.
S W, South Entry of West College.
N R, North Entry of Reunion Hall.
S R, South Entry of Reunion Hall.
N M R, North Middle Entry of Reunion Hall.
S M R, South Middle Entry of Reunion Hall.
E W, East Entry of Witherspoon Hall.
W W, West Entry of Witherspoon Hall.
E M W, East Middle Entry of Witherspoon Hall.
W M W, West Middle Entry of Witherspoon Hall.
N Ed, North Entry of Edwards Hall.
S Ed, South Entry of Edwards Hall.
U, University Hall.
N D, North Entry of Albert B. Dod Hall.
M D, Middle Entry of Albert B. Dod Hall.
S D, South Entry of Albert B. Dod Hall.
E B, East Entry of David Brown Hall.
W B, West Entry of David Brown Hall.
S E B, South East Entry of David Brown Hall.
S W B, South West Entry of David Brown Hall.
A S, Alexander Hall, Seminary.
B S, Brown Hall, Seminary.
H S, Hodge Hall, Seminary.

HONORS AND DEGREES CONFERRED.

DEGREES.

DEGREES IN COURSE, CONFERRED NOVEMBER, 1893.

MASTER OF ARTS (*A.M.*).....1.

Alexander James MacGillivary, A.B., Univ. of Manitoba, 1891.

CIVIL ENGINEERS (*C.E.*).....2.

Frederick Sheppard Titsworth, as of the Class of 1893.
William John Barkley, as of the Class of 1893.

DEGREES IN COURSE, CONFERRED FEBRUARY, 1894.

MASTERS OF ARTS (*A.M.*).....3.

Stanley Carnahan Hughes, '89,
Jacob Berner Hillegass, '90,
Alfred Thompson Kelly, '90.

CIVIL ENGINEERS (*C.E.*).....2.

George Klots, as of the Class of 1893.
Heber Clyde Inslee, as of the Class of 1893.

HONORARY DEGREES, CONFERRED JUNE, 1894.

LL.D.—Rev. Howard Osgood, D.D., New York.
Hon. Abraham V. Van Fleet, New Jersey.
Col. Alfred A. Woodhull, M.D., '56, United States Army.
D.D. —Rev. Pleasant Hunter, Jr., Minnesota.
Rev. Joseph L. Potter, '67, Persia.
Ph.D. —William H. Brace, New Jersey.
A.M.— Austin Flint, Jr., M.D., New York.

DEGREES IN COURSE, CONFERRED JUNE, 1894.

Doctors of Philosophy (*Ph.D.*).....4.

Alfred Pearce Dennis, '91; A.M., 1892.
Caspar Wistar Hodge, '92.
Edwin Mortimer Hopkins, '88.
Lewis Buckley Semple, A.B., Lehigh, 1884; A.M., 1891.

MASTERS OF ARTS (*A.M.*).....52

Elwood Waite Elder, '91,
John Nevius Dodd, '93,
William Ashenhurst Dunn, '93,
James Alexander Miller, '93,
James Warren Ritchey, '93,
Guy Allan Tawney, '93,
John Lee Tildsley, '93,
Herbert Ludlum Winans, '93.
John Copeland, A.B., *Royal University, Belfast, Ireland*, 1889.
Arthur Thomas Young, A.B., *Park College, Mo.*, 1890.
Oscar Woodward Zeigler, A.B., *Johns Hopkins*, 1890.
Hunter St. John, '83,
Kemper Fullerton, '88,
William Howard King, '89,
Albert Edwin Keigwin, '91,
John Carruthers Leach, '91,
Edwin Aug. Stevens Lewis, '91,
Henry Alexander McConkey, '90,
Albert Reed, '90,
Joseph Edgar Maxwell, '84–'91,
John Riddle Vance, '87,
George Jeffery Bergen, '91,
William Bayard Blackwell, '91,
Curtis Arris Bosserman, '91,
Nathan Thomas Brown, '91,
Willie Winfield Casselberry, '91,
Louis Burton Crane, '91,
William Russell Deemer, '91,
Claire H. Denman, '91,
James Henry Dunham, '91,
William Littell Everitt, '91,
Henry Woodhull Green, '91,
Erskine Hewitt, '91,
David Stuart Dodge Jessup, '91,
Glen Ford McKinney, '91,
James Alexander Matheson, '91,
James Cowden Meyers, '91,
Homer Ramsdell Miller, '91,
Mushegh Minas Minassean, '91,
John Cameron Motter, '91,
Samuel Grant Oliphant, '91,
Henry Page. Jr., '91,
George Stevenson Patton, '91,
Nelson Lane Petty, '91,
William Richards Ridington, '91,
Joseph Stockton Roddy, '91,
George Howell Shields, Jr., '91,
Charles Arthur Sidler, '91,
Robert Boorman Strong, '91,
George R. Wallace, '91,
Samuel Carson Wasson, '91,
William Campbell Trusdell, B. S., '91 (post obitum).

Master of Science (*M.S.*)

John Young Graham, B.S., '92

BACHELORS OF ARTS (*A.B.*).....150

Henry Leland Akin,	Omaha, Neb.
John Harvey Alexander,	Benton, Tenn.
Yorke Allen,	South Orange, N. J.
Franklin Morse Archer,	Camden, N. J.
William Park Armstrong, Jr.,	Selma, Ala.
Judson Hooker Bailey,	Albany, N. Y.
Thomas Fisher Bailey,	Huntington, Pa.
Alexander Benson,	Philadelphia, Pa.
John Livingston Bissell,	Sioux City, Ia.
James Robert Blake,	Newark, N. J.
James Maclin Brodnax,	Mason, Tenn.
Webster Browning,	Lyons, Kan.
Murray Peabody Brush,	Columbus, O.
John Ludlow Bushnell,	Springfield, O.
Alden Matthews Califf,	East Smithfield, Pa.
James Shaw Campbell,	Sewickley, Pa.
Theodore Melville Carlisle,	Newburgh, N. Y
Benjamin Franklin Carter,	Montclair, N. J.
Charles Merritt Cartwright,	Waynesville, O.
Albert Roe Chamberlain,	Chester, N. Y.
Cummings Waldo Cherry,	Pittsburgh, Pa.
James Austin Church, Jr.,	Brooklyn, N. Y.
Snyder Hoxie Clark,	St. Louis, Mo.
Samuel Harry Clinedinst,	Caldwell, O.
Linn Cochran,	Springfield, O.
James Carpenter Coleman, Jr.,	Goshen, N. Y.
Harry Hobart Condit,	Troy Hills, N. J.
Thomas Douglas Corry,	Covington, Ky.
Thomas Creigh,	Omaha, Neb.
Ulric Dahlgren,	Trenton, N. J.
Albert Thomas Davis,	East Orange, N. J.
Horace Day,	Plymouth, Pa.
Larimer Conover Denise,	Omaha, Neb.
Seth Delmer Dice,	Xenia, O.
Samuel Dickey,	Oxford, Pa.
John Moore Dickinson,	Trenton, N. J.
George Dickson Edwards,	Pittsburgh, Pa.
Paul Erdman,	Morristown, N. J.

Edwin Platt Essick,	Yonkers, N. Y.
Benjamin Howard Everitt,	Jamesburg, N. J.
Boyd Ross Ewing,	Blairsville, Pa.
James Fentress, Jr.,	Chicago, Ill.
Herbert Herschel Fisher,	Peoria, Ill.
Howard Shreve Fisher,	Swissvale, Pa.
William Floyd,	New York City.
Grant Colfax Fox,	Wayland, N. Y.
Cleveland Frame,	Philadelphia, Pa.
Karl George,	Watertown, N. Y.
James Gibson, Jr.,	Salem, N. Y.
Malcolm Goodridge,	Flushing, N. Y.
Wyllys King Grier,	Peoria, Ill.
Walter Eugene Gunster,	Scranton, Pa.
Charles Sumner Havens,	Toms River, N. J.
Andrew Williamson Hayes,	Allegheny, Pa.
Alfred Edward Holmes,	Plainfield, N. J.
Charles Grant Hopper,	Philadelphia, Pa.
Theodore Friend Humphrey,	South Orange, N. J.
Robert Bonner Jack,	Hazleton, Pa.
Robert Perkins Jack,	Peoria, Ill.
Oscar Wilde Jeffery,	Washington, N. J.
Paul Burrill Jenkins,	Sioux City, Ia.
Thomas Addison Jenkins,	Brooklyn, N. Y.
Alexander Davis Jenney,	Syracuse, N. Y.
William James Raphael Johnston,	Cincinnati, O.
Joseph William Lester Jones,	East Orange, N. J.
Ernest Farwell Keigwin,	Wilmington, Del.
John Miller Kennedy,	Pittsburgh, Pa.
Winfield Scott Kennedy, Jr.,	Covington, Ky.
James Wellington Kiesling,	Reading, Pa.
Samuel Wardwell Kinney,	Rome, N. Y.
Herbert Zabriskie Kip,	Cleveland, O.
Edward Reed Laughlin,	Pittsburgh, Pa.
Robert Wilson Lewis,	Portland, Ore.
William Gamble Liggett,	Pittsburgh, Pa.
Daniel Weisiger Lindsey, Jr.,	Frankfort, Ky.
George Brown Linnard,	Germantown, Pa.
Malcolm Lloyd, Jr.,	Philadelphia, Pa.

Stephen Timothy Lockwood,	Buffalo, N. Y.
Walter Lowrie,	Warrior's Mark, Pa.
Paul Hagans Ludington,	Omaha, Neb.
Girard Lindsley McAllister,	Rondout, N. Y.
Clifford McBride,	Indianapolis, Ind.
George Stewart McCague,	Omaha, Neb.
George Merriweather McCampbell, Jr.,	Middletown, O.
William Hoge McCartney,	Mercer, Pa.
William Lloyd McCauley,	Stanley, N. Y.
Donald MacColl,	Caledonia, N. Y.
John Davidson McCord,	Allegheny City, Pa.
Frank Armstrong McCune,	Pittsburgh, Pa.
Alexander McGaffin,	Northfield, Mass.
Charles Howard McIlwain,	Saltsburg, Pa.
John Lewin McLeish,	Cincinnati, O.
Shirrell Norton McWilliams,	Buffalo, N. Y.
William Farragut Meredith,	New York City.
Frederick Morton Merril,	Lewiston, Me.
Alexander Jay Miller,	Bellefontaine, O.
James McCormick Mitchell,	Buffalo, N. Y.
Charles Frederick Morrison,	Jhilam, India.
John Murdock (post obitum),	Pittsburgh, Pa.
John Albert Murray,	New York City.
John Crosby Neely,	Chicago, Ill.
Horace Franklin Nixon,	Woodbury, N. J.
Edward James Patterson,	Plainfield, N. J.
Archibald McDowell Pepper,	Sardis, Miss.
Thomas Jefferson Perkins,	Germantown, Pa.
Edward Charles Petrie,	Plainfield, N. J.
Robert Kay Portser,	Greensburg, Pa.
Daniel Pratt,	Syracuse, N. Y.
George Madison Priest,	Henderson, Ky.
Louis Irving Reichner,	Philadelphia, Pa.
Francis Graham Riggs,	Baltimore, Md.
Henry Griffith Riggs,	Baltimore, Md.
Edward Rutledge Robbins,	North Branch, N. J.
Ernest Percival Roberts,	Bahamas, W. I.
Charles Alexander Robinson,	West Hebron, N. Y.
Charles Rugh,	Greensburg, Pa.

Edward Johnson Russell,	Princeton, N. J.
Philip Schieffelin Sabine,	New York City.
James Hastings Scrimgeour,	Brooklyn, N. Y.
William Alfred Sexton,	West New Brighton, N. Y.
Henry Mandlebert Sheldon,	Newark Valley, N. Y.
Frank Clarence Shultis,	Pittsford, N. Y.
Henry King Siebeneck,	Allegheny, Pa.
Frederick Hoffman Smith, 3d,	Newark, N. J.
James Ramsey Swain,	Allentown, N. J.
Robert Otis Swan,	Oyster Bay, N. Y.
Benjamin William M'Cready Sykes,	Scotch Plains, N. J.
Edward Thaw,	Pittsburgh, Pa.
Frank Forrester Thompson,	Milroy, Pa.
Henry Soffe Thompson,	New York City.
James MacNaughton Thompson,	Albany, N. Y.
Frederick Jagger Tooker,	East Orange, N. J.
William Hogarth Tower,	Brooklyn, N. Y.
John Harold Turner,	Corning, Ia.
Nathan Frederick Van Horson,	Mt. Vernon, N. Y.
Arthur Holland Wadsworth,	Warsaw, N. Y.
George Handy Wailes,	Salisbury, Md.
David Shove Walton,	East Orange, N. J.
Ernest Coniston Waterhouse,	Honolulu, Hawaiian Is.
Charles Roger Watson,	Cairo, Egypt.
John McGill White,	Germantown, Pa.
John Franklin Wilkins,	Washington, D. C.
George Howard Williams,	California, Mo.
George Weems Williams,	Baltimore, Md.
Guy Wilson,	Fort Missoula, Mont.
Albert Martin Woodruff,	Brooklyn, N. Y.
William Ring Woodruff,	Elizabeth, N. J.
Charles Beatty Worden,	Princeton, N. J.
Sidney Radwell Yarrow,	Lowell, Mass.
Harvey Wade Young,	Newark, N. J.

ELECTRICAL ENGINEERS (*E. E.*).....9

Hobart Dominick Betts,	Englewood, N. J.
Daniel Clarence Durland,	New York City.
John William Easton,	Princeton, N. J.
A.B., Princeton, 1892.	

William Elmer, Jr.,	Trenton, N. J.
Keppele Hall,	Trenton, N. J.
Otto Alvin Ormond, A.B., Princeton, 1891.	Elderton, Pa.
Robert Stuart Stewart, A.B., Princeton, 1891.	Detroit, Mich.
Robert Boorman Strong, A.B., Princeton. 1891.	New Brunswick, N. J.
Robert McKean Thomas,	Elizabeth, N. J.

BACHELORS OF SCIENCE (*B. S.*).....14

Samuel Hair Curran,	Chicago, Ill.
Walter Gray Elmer,	Trenton, N. J.
George Howard Forsyth,	Chicago, Ill.
Charles Edward French,	Amsterdam, N. Y.
William Edward Grant,	Summit, N. J.
Charles Courtenay Hoge,	Brooklyn, N. Y.
James Henry Kenyon,	Waverly, N. J.
Joseph Tompkins Low, Jr.,	New York City.
Charles Stephens Mackenzie,	Brooklyn, N. Y.
William Smith McKinney,	El Paso, Ill.
Frederick Clark Paulmier,	Madison, N. J.
Montgomery Hunt Sicard,	Westernville, N. Y.
Edward Seguin Van Duyn,	Syracuse, N. Y.
John Leslie Voorhees,	Amsterdam, N. Y.

CIVIL ENGINEERS (*C. E.*).....9

James Edward Bathgate, Jr.,	Newark, N. J.
Richard Walker Bogart, Jr.,	Yonkers, N. Y.
Gabriel Scott Brown,	Angels, Pa.
James Brown Burnett, Jr.,	Newark, N. J.
Charles Lorin Holt,	New York City.
Fred Bartlett Howland,	Titusville, Pa.
Franklin Corning Kenly,	Chicago, Ill.
Thomas Christy Chapin,	Montclair, N. J., as of the class of 1893.
Enrique Ybanez,	City of Mexico, as of the class of 1893.

HONORS—1893-1894.

COMMENCEMENT HONORS. FOR GENERAL EXCELLENCE.

SENIOR HONORMEN.—FIRST GROUP—*A.B., Magna cum laude.*

C. M. Cartwright,
J. C. Coleman, Jr.,
A. T. Davis,
G. D. Edwards,
Paul Erdman, *English Salutatory.*
C. S. Havans,
C. A. Robinson, *Latin Salutatory.*
G. H. Wailes.

SECOND GROUP—*A.B., Cum laude.*

F. M. Archer,
W. P. Armstrong, Jr.,
Webster Browning,
M. P. Brush,
A. M. Califf,
T. M. Carlisle,
B. F. Carter,
Thomas Creigh,
Horace Day,
L. C. Denise,
Samuel Dickey,
B. H. Everitt,
William Floyd,
Karl George,
W. K. Grier,
R. B. Jack,
J. W. L. Jones,
E. F. Keigwin,
S. W. Kinney,
H. Z. Kip,
S. T. Lockwood,
Walter Lowrie,
G. L. McAllister,
Clifford McBride,
W. H. McCartney,
Donald MacColl,
C. H. McIlwain,
F. M. Merrill,
A. J. Miller,
J. A. Murray,
H. F. Nixon,
E. J. Patterson,
E. C. Petrie,
Daniel Pratt,
G. M. Priest,
E. R. Robbins,
E. J. Russell,
H. M. Sheldon,
H. K. Siebeneck,
J. R. Swain,
B. W. M. Sykes,
F. F. Thompson,
A. H. Wadsworth,
C. R. Watson,
W. R. Woodruff,

Alexander McGaffin, *Valedictory.*

SENIOR SPECIAL HONORS. (See p. 69.)

PHILOSOPHY. *High Honors*—J. W. L. Jones, W. H. McCartney, E. J. Russell, B. W. M. Sykes.

HISTORY, JURISPRUDENCE AND POLITICS. *High Honors*—C. M. Cartwright, G. D. Edwards, H. K. Siebeneck. *Honors*—C. H. McIlwain.

CLASSICS. *High Honors*—C. S. Havens, C. A. Robinson, H. M. Sheldon, W. R. Woodruff. *Honors*—A. H. Wadsworth.

MODERN LANGUAGES. *High Honors*—M. P. Brush, G. M. Priest.

ENGLISH. *High Honors*—S. W. Kinney. *Honors*—Karl George.

MATHEMATICS. *High Honors*—E. R. Robbins.

PHYSICAL SCIENCE. *Honors*—A. M. Califf.

NATURAL SCIENCE. *Honors*—Ulric Dahlgren, Daniel Pratt, E. C. Waterhouse.

FELLOWS.

(For names of Fellows see p. 22.)

SENIOR PRIZEMEN.

ALEXANDER GUTHRIE MC COSH PRIZE.

B. W. M. Sykes.

LYNDE PRIZE DEBATE.

First, B. W. M. Sykes.
Second, Donald MacColl.
Third, C. R. Watson.

Lynde Debaters.

From the American Whig Society.	*From the Cliosophic Society.*
J. S. Campbell,	Donald MacColl,
G. C. Fox,	B. W. M. Sykes,
E. F. Keigwin,	C. R. Watson.

BAIRD PRIZEMEN.

The Baird Prize,	Alexander McGaffin.
In Oratory,	B. W. M. Sykes.
In Delivery,	E. R. Laughlin.
In Poetry,	B. W. M. Sykes.
In Disputation,	*First*, Donald MacColl.
	Second, C. R. Watson.

Competitors Appointed for Excellence in English Composition: For Baird Prize and Prize for Oratory—A. T. Davis, S. W. Kinney, G. S. McCague, Donald MacColl, Alexander McGaffin, J. R. Swain, B. W. M. Sykes. *For Prize for Oratory*—C. M. Cartwright, E. F. Keigwin, E. R. Laughlin, E. J. Patterson, H. M. Sheldon.

CLASS OF 1859 PRIZE IN ENGLISH LITERATURE.

B. W. M. Sykes.

GEORGE POTTS BIBLE PRIZES.

R. B. Jack, E. F. Keigwin.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.

J. A. Murray.

THEODORE CUYLER PRIZE IN ECONOMICS.

C. M. Cartwright.

CLASS OF 1869 PRIZE IN ETHICS.

Horace Day.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

C. W. Cherry.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.

Donald MacColl.

THE NEW YORK HERALD PRIZE.

S. R. Yarrow.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

B. W. M. Sykes.

JUNIOR PRIZEMEN.

JUNIOR FIRST HONOR SCHOLAR.

J. T. Faris.

MACLEAN PRIZE.

B. L. Hirshfield.

JUNIOR ORATOR MEDALS.

First, H. E. White.
Second, R. H. Carter.
Third, A. C. Imbrie.
Fourth, W. H. Butler.

Competing Junior Orators.

From the American Whig Society.	*From the Cliosophic Society.*
A. C. Imbrie,	W. H. Butler,
E. M. Norris,	R. H. Carter,
W. M. Urban,	J. C. Caton,
H. E. White,	B. L. Hirshfield.

DICKINSON PRIZE.

J. F. Crawford; *Honorable Mention*—W. M. Urban.

THOMAS B. WANAMAKER ENGLISH PRIZE.

H. A. McNulty.

CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Anglo-Saxon, H. B. Master.
English Literature, J. T. Faris.

SPECIAL PRIZE IN HISTOLOGY.

R. L. Wadhams.

JUNIOR HONORMEN.

First Group.

H. D. Carpenter,
J. T. Faris,
R. D. Hatch,
D. F. Platt,
J. C. Sloane,
W. D. Ward.

Second Group.

F. C. Bradner,
W. H. Butler,
A. S. Cook,
W. B. Cooke,
J. F. Crawford,
J. S. Crawford,
W. R. Darby,
D. W. Dexter,
J. R. Flemming,
C. S. Foster,
R. P. Harris,
N. B. Harrison,
Alfred Hayes, Jr.,
E. H. Hoos,
F. de H. Janvier,
L. C. Kennedy,
R. L. Kennedy,
F. W. Lewis,
V. H. Lukens,
S. R. McCormick,
H. A. McNulty,
J. S. Newbold,
E. M. Norris,
E. R. Otheman,
J. W. Park,
Christy Payne,
R. E. Ross,
W. I. Seymour,
A. M. Sherman,
J. C. Smith,
E. T. Stewart,
W. M. Urban,
F. C. Van Sellar,
D. M. F. Weeks,
A. R. Wells.

JUNIOR HONORMEN, SCHOOL OF SCIENCE.

B. S. Course—1. A. Parker,
2. E. S. LaFetra,
3. R. W. Bailey,
4. H. M. Canby.

C. E. Course—C. A. Poole.

SOPHOMORE PRIZEMEN.

CLASS OF 1861 PRIZE.

A. H. Lybyer.

FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

E. S. Worcester.

CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

F. W. Loetscher; *Honorable mention*—J. M. Trout.

STINNECKE SCHOLAR.

C. B. Bostwick.

SOPHOMORE SPECIAL HONORS.

(See page 68.)

GREEK. *High Honors*—L. H. Gray. *Honors*—E. H. Bishop, C. B. Bostwick, E. W. Hamilton, A. T. Johnson, W. K. Musser, O. B. Sprecher, S. R. Spriggs, J. M. Trout, L. J. Wayave, Jr.

LATIN. *High Honors*—L. H. Gray, E. B. Hodge, Jr., F. W. Loetscher, E. S. Worcester. *Honors*—F. O. Allen, Jr., H. B. Armes, J. N. Beam, P. H. Churchman, A. H. Lybyer, W. A. Mather, S. C. Reese, J. M. Trout, H. Ure, L. J. Wayave, Jr., W. J. Wright.

MATHEMATICS. *High Honors*—A. H. Lybyer, H. G. Pierce. *Honors*—W. L. Johnson, R. R. Knight, R. L. Litch, D. Park, S. C. Reese, F. H. Ward.

SOPHOMORE HONORMEN.

First Group.

L. H. Gray,	Newark Academy, Newark, N. J.
E. B. Hodge, Jr.,	Van Rensselaer Seminary, Burlington, N. J.
F. W. Loetscher,	High School, Dubuque, Iowa.
A. H. Lybyer,	High School, Brazil, Ind.
W. A. Mather,	The Chapin Collegiate School, New York.
J. J. Moment,	Mr. E. C. Warner, Brooklyn, N. Y.
J. M. Trout,	Blair Presbyterial Academy, Blairstown, N. J.
E. S. Worcester,	Halsey's Collegiate School, 34 W. 40th St., N. Y.

Second Group.

F. O. Allen, Jr.,	The Franklin School, Philadelphia.
H. B. Armes,	High School, Washington, D. C.
J. N. Beam,	Franklin and Marshall Academy, and Mr. A. H. Espenshade.
E. H. Bishop,	Newark Academy, Newark, N. J.
C. B. Bostwick,	Halsey's Collegiate School, 34 W. 40th St., N. Y.
P. H. Churchman,	Van Rensselaer Seminary, Burlington, N. J.

J. B. Cochran,	Mr. Talmage, Morristown, N. J.
A. A. Doolittle,	State Normal School, Fredonia, N. Y.
J. P. Erdman,	High School, Morristown, N. J.
E. W. Hamilton,	The Chapin Collegiate School, New York.
A. T. Johnson,	Eastburn Academy, Philadelphia.
W. L. Johnson,	Dr. Holbrook's Military Acad., Sing Sing, N. Y.
W. E. Lampe,	Frederick College, Frederick, Md.
R. L. Litch,	Tabor Academy, Marion, Mass.
M. C. Morgan,	Princeton Preparatory School.
R. B. Perry,	The Franklin School, Philadelphia.
S. C. Reese,	Central High School, Pittsburgh, Pa.
S. R. Spriggs,	Delaware Academy, Delhi, N. Y.
Herbert Ure,	Newark Academy, Newark, N. J.
F. H. Ward,	St. Paul's School, Concord, N. H.
L. J. Wayave, Jr.,	Corning Free Academy, Corning, N. Y.
W. J. Wright,	Dr. W. M. Greenlee, Knoxville, Tenn.

SOPHOMORE HONORMEN, SCHOOL OF SCIENCE.

B. S. Course.

1. E. L. Ford,	East Liberty Academy, Pittsburgh, Pa.
2. F. D. Parker,	High School, Fostoria, O.

C. E. Course.

1. William Bush,	Friends' School, Wilmington, Del.
2. W. T. Lyle,	Newark Academy, Newark, N. J.
3. L. L. Smith,	State Model School, Trenton, N. J.

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F. N. Jessup.

FRESHMAN HONORMEN.

First Groap.

F. N. Jessup,	Lawrenceville.
David Magie, Jr.,	Lyon's Classical School, N. Y. City.
A. M. Patterson,	Miss A. M. MacCracken, Xenia, O.
H. N. Russell,	H. N. Van Dyke and Princeton Prep. School.
Nicholas Stahl,	School of the Lackawanna, Scranton, Pa.

Second Group.

E. W. Axson,	Lawrenceville.
H. M. Beam,	Franklin and Marshall Acad., Lancaster, Pa.
P. R. Colwell,	Warwick Institute, Warwick, N. Y.
E. G. Elliott,	The Webb School, Bell Buckle, Tenn.
J. M. Frame,	High School, Reading, Pa.
W. P. Jessup,	Goshen High School, Goshen, N. Y.
A. W. Leonard,	Mr. Leal's School, Plainfield, N. J.
B. R. Miller,	Germantown Academy.
L. H. Miller,	Mr. Leal's School, Plainfield, N. J.
D. E. Nevin,	Shadyside Academy, Pittsburgh, Pa.
J. H. Nichols,	Delaware Academy, Delhi, N. Y.
H. A. Norris,	Phillips Academy, Exeter, N. H.
F. B. Pierson,	Lawrenceville.
W. M. Post,	Lawrenceville.
H. F. Stockwell,	Phillips Academy, Exeter, N. H.

FRESHMAN HONORMEN—SCHOOL OF SCIENCE.

1. Edwin Shortz, Jr.,	Harry Hillman Acad., Wilkes Barre, Pa.
2. H. A. Harris,	H. N. Van Dyke.
3. J. W. Ryle,	Class. and Scientific School, Paterson, N. J.
4. A. W. Jamison,	High School, Peoria, Ill.
5. J. M. Townley,	Cheltenham Academy.
6. John De Gray,	Class. and Scientific School, Paterson, N. J.

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GEORGE W. CHILDS PRIZES IN PHILADELPHIA—*Academic Department*—E. M. Clark. *School of Science*—H. H. Kennedy, Jr.

IN CHICAGO—C. S. Reed.

FROM NEWARK — *Academic Department* — A. W. Harris, *School of Science*—R. S. Brooks.

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Professor HENRY C. CAMERON, Ph.D., D.D., '47.
M. TAYLOR PYNE, LL.B., '77.

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Secretary, ROBERT KELLY PRENTICE, Esq., '84, 155 Broadway.

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Founded 1872.

President, Hon. JOSEPH K. MCCAMMON, '65.
Secretary, HENRY C. STEWART, Jr., Esq., '84.
620 14th St., N. W., Washington.

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Founded as an Association 1875. Reorganized as a Club 1893.

President, WILLIAM SCOTT, Esq., '68.
Secretary, FRANK SCOTT WILLOCK, Esq., '90.
Second National Bank, Pittsburgh.

THE PRINCETON ALUMNI ASSOCIATION OF CINCINNATI.

Founded 1875.

President, Col. JAMES W. ABERT, '88.
Secretary, EDWARD H. ERNST, Esq., '82.
419 Madison St., Covington, Ky.

THE PRINCETON CLUB OF CHICAGO.

Founded 1876.

President, Rev. THOS. C. HALL, '79.
Secretary, ALVIN C. MCCORD, Esq., '89, "The Rookery."

THE PRINCETON CLUB OF ST. LOUIS.

Founded 1876.

President, JOHN D. DAVIS, Esq., '72.
Secretary, WM. CHRISTY BRYAN, Esq., '91, 2654 Locust St.

THE PRINCETON CLUB OF THE PACIFIC COAST.

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CATALOGUE

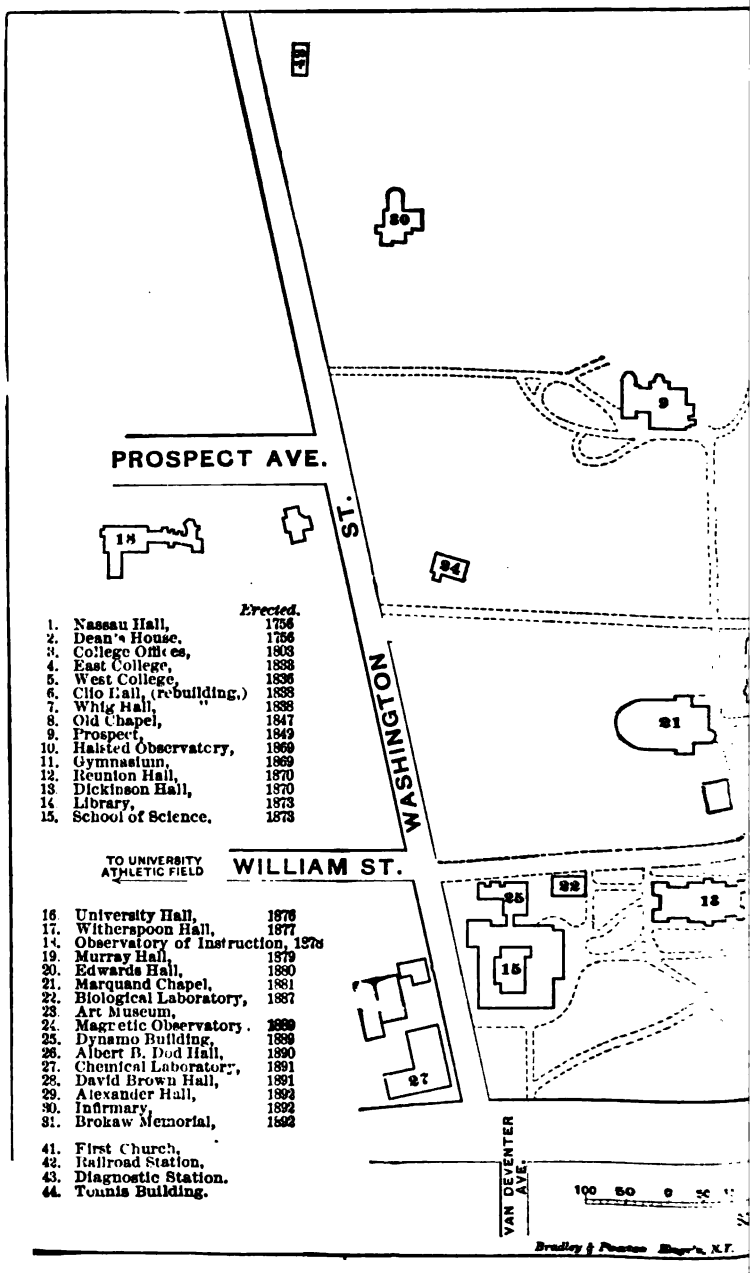
OF THE

COLLEGE OF NEW JERSEY

AT

PRINCETON

1895-96



		Erected.
1.	Nassau Hall,	1756
2.	Dean's House,	1756
3.	College Offices,	1803
4.	East College,	1833
5.	West College,	1836
6.	Clio Hall, (rebuilding,)	1838
7.	Whig Hall, "	1838
8.	Old Chapel,	1847
9.	Prospect,	1849
10.	Halsted Observatory,	1869
11.	Gymnasium,	1869
12.	Reunion Hall,	1870
13.	Dickinson Hall,	1870
14.	Library,	1873
15.	School of Science,	1873
16.	University Hall,	1876
17.	Witherspoon Hall,	1877
18.	Observatory of Instruction,	1878
19.	Murray Hall,	1879
20.	Edwards Hall,	1880
21.	Marquand Chapel,	1881
22.	Biological Laboratory,	1887
23.	Art Museum,	
24.	Magnetic Observatory,	1889
25.	Dynamo Building,	1889
26.	Albert B. Dod Hall,	1890
27.	Chemical Laboratory,	1891
28.	David Brown Hall,	1891
29.	Alexander Hall,	1892
30.	Infirmary,	1892
31.	Brokaw Memorial,	1892
41.	First Church.	
42.	Railroad Station.	
43.	Diagnostic Station.	
44.	Tennis Building.	

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For Catalogues apply to
H. N. VAN DYKE, Registrar.

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CALENDAR.

1895.

Sept. 17–18.	Examinations for admission, and the removal of entrance conditions in Princeton only.
Sept. 18.	First term begins.
Sept. 23–28.	Examinations for removal of first and second term conditions.
Sept. 25.	Preliminary examination for University degrees.
Oct. 28–Nov. 2.	Second opportunity for removal of second term conditions.
Nov. 14.	Stated Meeting of the Board of Trustees.
Nov. 28.	Thanksgiving Day.
Dec. 18, 12.30 P. M.	Christmas vacation begins.

1896.

Jan. 2.	Christmas vacation ends.
Jan. 12.	Day of Prayer for Colleges.
Jan. 27–Feb. 5.	Term Examinations.
Feb. 5.	End of first term.
Feb. 6.	Second term begins.
Feb. 13.	Stated Meeting of the Board of Trustees.
Feb. 22.	Washington's Birthday—Class of 1876 Prize Debate, 10 A. M.
Mar. 9–14.	Examinations for removal of first term conditions.
April 2, 12 P. M.–April 7, 11.30 A. M.	Spring Recess.
May 10.	Last day for renewing room agreements for '96-'97. Annual allotment of rooms.
May 18–23.	Senior final examinations.
May 27–June 5.	Examinations of the three lower classes.
June 7.	Baccalaureate Sunday.
June 8–10.	Commencement Meeting of the Board of Trustees.
June 8.	Class Day—Junior Orations, 7.30 P. M.
June 9.	Reading of Theses by scientific students—Annual Meetings of Literary Societies and Alumni Association—Lynde Prize Debate, 7.30 P. M.
June 10.	149th Annual Commencement.

June 11–12.	Examinations for admission, held simultaneously in Princeton and elsewhere.
June 12–Sept. 22.	Long vacation.
Sept. 22–23.	Examinations for admission, and the removal of entrance conditions in Princeton only.
Sept. 23.	First term begins—College assembles at 3 P. M. in Marquand Chapel.
Sept. 28–Oct. 3.	Examinations for removal of first and second term conditions.
Sept. 30.	Preliminary examinations for University degrees.
Oct. 20–22.	Celebration of the 150th anniversary of the signing of the charter.
Nov. 1–7.	Second opportunity for removal of second term conditions.
Nov. 12.	Stated Meeting of the Board of Trustees.
Nov. 26.	Thanksgiving Day.
Dec. 23, 12.30 P. M.	Christmas vacation begins.

1897.

Jan. 6.	Christmas vacation ends.
Feb. 1–10.	Term examinations.
Feb. 10.	End of first term.
Feb. 11.	Second term begins.
April 16–20.	Spring Recess.
May 19–29.	Senior final examinations.
June 2–11.	Examinations of the three lower classes.
June 16.	150th Annual Commencement.

1895.

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THE COLLEGE OF NEW JERSEY.

The College originated in the plan of Jonathan Dickinson, John Pierson, Ebenezer Pemberton, Aaron Burr, with others, to found an institution "in which ample provision should be made for the intellectual and religious culture of youth desirous to obtain a liberal education, and more especially for the thorough training of such as were candidates for the holy ministry." Its first charter was granted in 1746 by the Hon. John Hamilton, President of His Majesty's Council, and is noteworthy as the first college charter ever given in this country by a Governor or acting Governor with simply the consent of his Council.

A second and more ample charter was granted September 14th, 1748, by the "trusty and well-beloved" Jonathan Belcher, Esquire, Governor and Commander-in-chief of the province of New Jersey. After the war of the Revolution, the charter was confirmed and renewed by the Legislature of New Jersey. The Corporation is styled in that instrument "the Trustees of the College of New Jersey," and they are empowered to hold and administer the property of the College, make laws for the government of the institution, choose its President and Faculty and confer degrees. This Board is a self-perpetuating body, composed of twenty-seven members, with the Governor of the State as President *ex-officio*, or, in his absence, the President of the College. In response to the earnest desire of the petitioners for this charter, that "those of every religious denomination may have free and equal liberty and advantage of education in the said college, any different sentiments in religion notwithstanding," it was expressly provided that no

"person of any religious denomination whatsoever" should be excluded "from free and equal liberty and advantage of education or from any of the liberties, privileges or immunities of the said college on account of his or their being of a religious profession differing from the said trustees of the said college."

On April 27th, 1747, the Trustees made a public announcement that they had "appointed the Rev. Jonathan Dickinson President," and that the college would be opened in the fourth week of May next at Elizabethtown. President Dickinson having died on the 7th of October following, the Rev. Aaron Burr assumed the duties of the Presidency and the college was removed from Elizabethtown to Newark. Soon after, it was removed from Newark to Princeton, where in 1754–55 the first college building was erected. It was proposed to name this building "Belcher Hall" in recognition of Governor Belcher's devoted services. At his request that it should be called Nassau Hall, the Trustees ordered "that the said edifice be in all time to come called and known by the name of Nassau Hall."

The College of New Jersey, as now constituted, includes the John C. Green School of Science. This institution, which has its own professors and instructors, was founded in 1878 upon an endowment of Mr. John C. Green. The instruction given falls in three departments, General Science, Civil Engineering and Electrical Engineering. Its design is to furnish more extended and special instruction in the natural sciences, providing several scientific courses leading to the degree of Bachelor of Science and also various graduate courses. The Department of Civil Engineering was added in 1875, by further endowment from the residuary legatees of Mr. Green. The Department of Electrical Engineering was added in 1889, by the same donors.

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Professor of Physics.
58 Library Place.

ERNEST CUSHING RICHARDSON, PH.D.,
Librarian.
Mercer St.

LEROY WILEY McCAY, D.SC.,
Professor of Chemistry.
80 University Place.

JAMES MARK BALDWIN, PH.D.,
Stuart Professor of Experimental Psychology.
38 Stockton St.

BLISS PERRY, A.M.,
Professor of Oratory and Aesthetic Criticism.
254 Mercer St.

HENRY DALLAS THOMPSON, D.Sc., PH.D.,
Professor of Mathematics.
80 University Place.

GEORGE McLEAN HARPER, PH.D., Princeton,
Woodhull Professor of Romance Languages.
14 Dickinson St.

WINTHROP MORE DANIELS, A.M.,
Professor of Political Economy.
5 South East David Brown Hall.

HERBERT STEARNS SQUIER SMITH, C.E.,
Assistant Professor of Civil Engineering.
4 East Witherspoon Hall.

TAYLOR REED, A.M.,
Assistant Professor of Astronomy.
Observatory, Prospect Av.

JOHN GRIER HIBBEN, PH.D., Princeton,
Assistant Professor of Logic, and T. H. P. Sailer Assistant in Biblical Instruction.
50 Washington St.

WILLARD HUMPHREYS, PH.D.,
Assistant Professor of German.
11 Bayard Av.

WALTER BUTLER HARRIS, C.E.,
Assistant Professor of Civil Engineering.
36 Mercer St.

EDWIN SEELYE LEWIS, PH.D., Johns Hopkins,
Assistant Professor of Romance Languages.
Nassau Hotel.

GEORGE STEVENSON PATTON, A.M.,
Assistant Professor of Biblical Instruction and Secretary to the President.
Prospect.

WALTER MEAD RANKIN, PH.D., Munich,
Assistant Professor of Biology and Curator of the Zoological Museum.
60 University Place.

CHARLES FREEMAN WILLIAMS McCLURE, A.M.,
Assistant Professor of Biology.
80 University Place.

ALEXANDER HAMILTON PHILLIPS, B.S.,
Instructor in Mineralogy.
Stony Brook.

CHARLES SIDNEY SMITH, A.M.,
Instructor in Latin.
20 Canal St.

FRED NEHER, A.M.,
Instructor in Analytical Chemistry.
80 University Place.

REV. CHALMERS MARTIN, A.M.,
Instructor in Hebrew.
342 Nassau St.

JAMES PURVIANCE ATKINSON, A.B.,
Assistant in Chemistry and Mineralogy.
8 South East College.

GEORGE AUGUSTUS HULETT, A.B.,
Assistant in Chemistry.
12 Nassau Hall.

FREDERIC CROSBY TORREY,
Instructor in Graphics.
8 North West College.

CHARLES HOWARD HINTON, M.A., Oxon.,
Instructor in Mathematics.
78 Canal St.

FRANK ALLAN WATERMAN, A.B.,
Instructor in Physics.
69 Prospect Av.

HOWARD CROSBY WARREN, A.M.,
Demonstrator in Experimental Psychology.
10 Bayard Av.

LEGH WILBER REID, A.B.,
Instructor in Mathematics.
22 Stockton St.

HARRY FRANKLIN COVINGTON, A.M.,
Assistant in Oratory.
T, University Hall.

JOHN ELY MOORE, M.E., E.E.,
Assistant in Electrical Engineering.
256 Nassau St.

JOHN HOUGHTON CONEY, A.M.,
Instructor in History.
12 Library Place.

JOHN MILTON BROOKS, A.M.,
Instructor in Mathematics.
50 Nassau St.

JOHN BELL HATCHER, PH.B.,
Assistant in Geology.
76 Canal St.

ELMER HOWARD LOOMIS, PH.D., Strasburg,
Instructor in Physics.
16 Vandeventer Av.

EDMUND YARD ROBBINS, A.M.,
Instructor in Greek.
6 South Albert B. Dod Hall.

WILLIAM KELLY PRENTICE, A.M.,
Instructor in Greek.
7 Edwards Place.

WILLIAMSON UPDIKE VREELAND, A.B.,
Instructor in Romance Languages.
11 South West David Brown Hall.

WILLIAM ASHENHURST DUNN, A.M.,
Assistant in English.
6 South Middle Reunion Hall.

HERBERT FOWLER SILL, B.S.,
Assistant in Applied Chemistry.
2 Stockton St.

HERBERT JEFFERSON FRASER,
Instructor in Civil Engineering.
106 Nassau St.

WALTER A. WYCKOFF, A.M.,
Lecturer on Sociology.
27 South Edwards Hall.

HOWARD CROSBY BUTLER, A.M.,
Lecturer on Architecture.
Guernsey Hall.

CASPAR WISTAR HODGE, PH.D., Princeton,
Instructor in Philosophy.
80 Mercer St.

JESSE BENEDICT CARTER, A.B.,
Instructor in Latin.
14 North Albert B. Dod Hall.

ULRIC DAHLGREN, A.B.,
Assistant in Histology.
43 University Hall.

ALBERT HARRIS WILSON, M.S.,
Instructor in Mathematics.
4 South West David Brown Hall.

GEORGE MADISON PRIEST, A.B.,
Instructor in German.
61 Brown Hall.

CHARLES ROGER WATSON, A.B.,
Instructor in French.
61 Brown Hall.

JOHN PRESTON HOSKINS, PH.D., Berlin,
Instructor in German.
124 Nassau St.

OTHER COLLEGE OFFICERS.

EDWIN CURTIS OSBORN,
Treasurer.
College Offices.

HENRY NEVIUS VAN DYKE, A.M.,
Registrar.
College Offices.

HENRY GREEN DUFFIELD, A.B.,
Assistant Treasurer.
23 University Place.

ARNOLD EDWARD ORTMANN, PH.D., Jena,
Curator of Invertebrate Paleontology.
66 William St.

JOHN BELL HATCHER, PH.B.,
Curator of Vertebrate Palæontology.
76 Canal St.

GEORGE GOLDIE,
Director of Gymnasium.
35 University Place.

EDWARD HODGE BISHOP,
Organist.
5 North East College.

JOHN WILLIAM TOPLEY,
Proctor.
9 Park Street.

STANDING COMMITTEES OF THE FACULTY.

Library—Chairman—THE PRESIDENT.
Secretary—THE DEAN.

Schedule of Studies—Chairman—THE PRESIDENT.
Secretary—PROFESSOR WEST.

Weekly Schedules and Examinations—
Chairman—PROFESSOR THOMPSON.

Local Entrance Examinations—Chairman—THE PRESIDENT
Secretary—PROFESSOR FINE.

Graduate Department—Chairman—THE PRESIDENT.
Secretary—PROFESSOR MAGIE.

Absences—Chairman—THE DEAN.

Examinations and Standing—Chairman—PROFESSOR WINANS.
Secretary—PROFESSOR HUMPHREYS.

Special Students—Chairman—PROFESSOR WILSON.
Secretary—PROFESSOR DANIELS.

Discipline—Chairman—THE DEAN.
Secretary—PROFESSOR WILSON.

Sanitary—Chairman—THE DEAN.
Secretary—PROFESSOR SLOANE.

Music—Chairman—PROFESSOR MARQUAND.

Out-Door Sports—Chairman—PROFESSOR SLOANE.
Secretary—PROFESSOR FINE.

Scholarships and Charitable Funds—
Chairman—PROFESSOR DUFFIELD.

Teachers and Schools—Chairman—PROFESSOR PACKARD.
Secretary—PROFESSOR WINANS.

Catalogue—Chairman—PROFESSOR MAGIE.

OFFICE HOURS.

THE REGISTRAR, College Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday.

THE TREASURER, College Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday; June 15 to September 1, 9 to 12 daily.

THE FACULTY meets at four o'clock on Wednesday afternoon. Communications from students should be in writing and should reach the Registrar before Wednesday noon.

THE COMMITTEE ON ABSENCES meets at noon on Wednesday. Requests and excuses should be presented by the student in person.

CLASS OFFICERS.

ACADEMIC.

Seniors, ... PROFESSOR WILSON, 48 Library Place.
Juniors, ... PROFESSOR DUFFIELD, 23 University Place.
Sophomores, . . . PROFESSOR PACKARD, College Place.
Freshmen, ... PROFESSOR WESTCOTT, 27 University Place.
Special Students, . PROFESSOR FINE, 41 Prospect Av.

SCIENTIFIC.

Seniors, Juniors and Sophomores, B.S., and Special Students,
PROFESSOR CORNWALL, 51 Nassau Street.
Seniors, Juniors and Sophomores, C.E.,
PROFESSOR MCMILLAN, 40 Bayard Av.
Freshmen and first year Specials,
PROFESSOR ROCKWOOD, 34 Bayard Av.

FELLOWS.

Residence.

WILBUR MARSHALL URBAN, A.B., Berlin.
Chancellor Green Fellow in Mental Science.

LOUIS CLAYTON WOODRUFF, A.B., 7 North Edwards Hall.
Fellow in Classical Literature.

HOWARD DOTY CARPENTER, A.B., 11 South Edwards Hall.
Class of 1860 Fellow in Experimental Science.

WILLIAM DOUGLASS WARD, A.B., Lawrenceville.
J. S. K. Fellow in Mathematics.

———*
Boudinot Fellow in Modern Languages.

DEXTER MASON FERRY WEEKS, A.B.,
Boudinot Fellow in History.

———*
E. M. Biological Fellow.

GEORGE IRVING ADAMS, A.M., 47 Wiggins St.
Class of 1877 University Fellow in Biology.

ERNEST LUDLOW BOGART, A.B, 23 Edwards Pl.
South East Club University Fellow in Social Science.

* No appointment.

ACADEMIC DEPARTMENT.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty Room in the College Offices the evening before the examination begins or on their arrival the following morning. Examinations for admission will be written, with supplementary oral examinations if needed. The first examination will begin in Princeton, on Thursday, June 11th, 1896, at 10 A. M. The second will begin on Tuesday, September 22d, 1896, at 10 A. M. Applicants who have any conditions or other deficiencies from the June examination are required to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations will also be held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha, Denver; and at preparatory schools and other cities when necessary. The places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission to any class, or as special students, must bring with them testimonials of good moral character and attainments, preferably from their last instructors, and if the candi-

date has been a member of another college or university, he must produce a certificate from its President or Faculty that he is free from censure in that institution.

No candidate is admitted into the College without examination and a vote of the Faculty.

Immediately after the opening of the College the entering students meet according to announcement for the registration of their names and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other college so long as we are members of the College of New Jersey; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

Candidates for admission to the Freshman class will be examined in the books and subjects detailed below. It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

In the subjoined list of subjects, the following constitute the minimum requirements which are expected of all candidates: **1, 2, 3, 4, 5, 6; 12, 13, 14, 16** (or **15** or **17**); **20** (or **21**); **24, 25, 26, 27.**

Candidates who pass satisfactorily in certain of the other subjects, in addition to those enumerated above, may in this way secure advanced standing at the start in one or all of the subjects of instruction of the Freshman year. The requirements for advanced standing in each department are as follows:

In Latin: Two or more of **7, 8, 9, 10, 11** (one to be **7, 8** or **9**).

In Greek: Two or more of **15, 16, 17, 18, 19** (one to be **15, 16** or **17**, excluding the one offered as part of the minimum requirements).

In French: **22.** To be offered only by candidates offering **20.**

In German: **23.** To be offered only by candidates offering **21.**

In Mathematics: One and but one of **28, 29.**

1. *English.* The examination will consist of an exercise in English prose composition based upon specified books and authors. Questions as to the subject matter, structure, and style of these books will be asked. Candidates must be prepared in all of the books required for the year of entrance. For 1896, the books will be: Milton's L'Allegro and Il Penseroso, Macaulay's Essay on Milton, Longfellow's Evangeline, and Webster's First Bunker Hill Oration. For 1897 the books will be: Shakespeare's Merchant of Venice and As You Like It, Scott's Marmion, Longfellow's Evangeline, Burke's Speech on Conciliation with America, Macaulay's Life of Samuel Johnson, De Foe's History of the Plague in London, Irving's Tales of a Traveller, Hawthorne's Twice Told Tales, George Eliot's Silas Marner.

2. *Latin Grammar.* The inflections; the simpler rules for composition and derivation of words; syntax of cases and verbs; the structure of the sentence in general, with particular regard to relative and conditional sentences, indirect discourse and the subjunctive; so much prosody as relates to accent, versification in general and dactylic hexameter.

3. *Latin Composition.* Translation into Latin of easy continuous prose based upon Cæsar and Cicero.

Special attention is called to this requirement. It is strongly recommended that prose composition begin with the earliest study of Latin and be used continuously as the means for organizing the pupil's vocabulary under the forms of grammar. The writing of detached sentences should give place as soon as possible to practice in writing continuous prose, based chiefly or exclusively on definite portions of Cæsar and Cicero, during the whole time when these authors are being read. Such exercises may be found in Collar's Practical Latin Composition and Daniell's Exercises in Latin Composition.

4. *Cæsar.* The first five books of the Gallic War.

5. *Virgil.* The first six books of the Æneid, including the prosody of hexameter verse.

6. *Cicero.* Nine orations, including the four against Catiline, the orations for Archias and the Manilian Law, and any other three, preferably to be selected from the orations for Milo, for Marcellus, for Ligarius, and the fourteenth Philippic.

7. *Ovid.* Selections from the Metamorphoses (2500 lines).

8. *Sallust.* The Catiline or the Jugurtha.

[7 or 8 may be offered in place of any three orations of Cicero.]

9. *Virgil.* The Eclogues and Georgics, or the last six books of the Æneid.

10. *Latin Sight Translation.* Sight translation into English from easy Latin prose writers, such as Cornelius Nepos, Aulus Gellius, Quintus Curtius and Eutropius.

11. *Roman History and Geography.* The history of Rome down to the battle of Actium. The ancient geography of Italy and Gaul and the topography of the city of Rome.

12. *Greek Grammar.* The topics for examination in Greek grammar are similar to those enumerated under Latin grammar. Special stress is laid upon a thorough knowledge of the noun and verb inflections.

13. *Greek Composition.* Simple sentences and easy continuous discourse based upon Xenophon's Anabasis, chiefly to test the candidate's knowledge of accent, inflection and the fundamental rules for the syntax of the noun and verb.

14. *Xenophon.* The first four books of the Anabasis.

15. *Xenophon.* The fifth, sixth and seventh (chapters i-iii) books of the Anabasis.

16. *Herodotus.* The seventh book of the History (sections 1-60 and 172-239).

17. *Homer.* The first three books of the Iliad.

18. *Greek History and Geography.* The history of Greece down to the end of the Peloponnesian War. The ancient geography of Greece and Asia Minor.

19. *Greek Sight Translation.* Sight translation into English from easy Greek prose, such as the writings of Xenophon.

20. *Elementary French.* Translation at sight of easy French prose into English and of easy English exercises into French. Rudiments of grammar, including the irregular verbs. (So much as is in Whitney's Brief French Grammar, or Whitney's Practical French Grammar, Part I, or Edgren's, Part I.) Super's Reader, or Whitney's, is recommended, or an equivalent amount of reading.

21. *Elementary German.* Translation at sight of easy German prose into English and of easy English exercises into German. Rudiments of grammar, comprising declension of nouns; conjugation of auxiliary, regular, and irregular verbs; separable and inseparable verbs; declension and comparison of adjectives; pronouns;

the most frequent prepositions; numerals; the principles of the normal, inverted and transposed order. Fifty pages of easy prose: Grimm's Märchen or Meissner's Aus meiner Welt.

Either **20** or **21**, but not both, are to be offered.

22. *Advanced French.* Dumas: La Tulipe Noire, and Daudet: Lettres de mon Moulin. Translation into French of English exercises based on these books.

23. *Advanced German.* Five cantos of Goethe's Hermann und Dorothea, *or* Chamisso's Peter Schlemihl. Harris's German Composition: Introductory Selections and Easy Narrative Selections. (Parts I, II.)

24. *Arithmetic.* Including only greatest common divisor and least common multiple; vulgar and decimal fractions; percentage apart from its commercial applications; square root; the metric system of weights and measures. Special emphasis is laid upon accuracy and facility in reckoning.

25. *Plane Geometry.*

26. *Algebra.* Through quadratic equations involving two unknown quantities,—including radicals and fractional and negative exponents.

27. *Algebra.* Indeterminate equations of the first degree, ratio and proportion, variation, arithmetical and geometrical progression, undetermined coefficients and the binomial theorem.

28. *Solid and Spherical Geometry.*

29. *Logarithms and Plane Trigonometry.*

Preliminary Examinations.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate, unless he passes in at least four subjects, nor will the preliminary certificate be granted to any candidate more than once. English, Latin Grammar, Latin Composition, Greek Grammar and Greek Composition, Algebra **27** may not be tried at the preliminary examination. Elementary French or German may not be tried at the preliminary examination unless the candidate expects to offer **22** or **23** the next year.

Admission to Special Courses.

In exceptional cases, students, not members of any one of the four regular classes nor candidates for a degree, are admitted to the privileges of the College, and allowed to take special undergraduate courses, selected under the direction of the Faculty, in such a manner as to secure full and profitable employment of their time. Such special students undergo an entrance examination sufficient to ascertain their preparation for the courses proposed, and are subject to the same regulations and discipline and to the same examinations in the studies pursued, as other undergraduates. On completing their course they receive certificates of proficiency. These special courses, however, are not offered to those who have failed in the regular course.

Sophomore, Junior and Senior Entrance Requirements.

Candidates for admission to the Sophomore class who have not completed the studies of the Freshman year at another approved College must first pass an examination on the studies required for admission to the Freshman class.

Candidates for admission to the Sophomore, Junior or Senior class, when coming from another College, are examined only in the studies of the year preceding that which they wish to enter, provided they present evidence that they have passed satisfactory examinations on the previous studies of the curriculum and entrance requirements, or their equivalents.

A candidate coming from an undergraduate class in an approved College may be allowed, at the discretion of the Faculty, to enter the next lower class in this College, without examination, provided he presents satisfactory certificates from his former College.

The studies of the Freshman year are Latin, Greek, Mathematics, English, French or German. For admission to the Sophomore class, candidates will be examined on the following minimum amounts or equivalents.

In Greek: Xenophon's Hellenica, Books I–II; Herodotus, 60 pages, exclusive of any part offered for entrance to the Freshman class; Thucydides, Book II, or an equal amount.

In Latin: Horace, Odes, two books; Livy, books I and XXI or XXII; Cicero, *De Senectute;* Roman History to the time of Augustus; Prose Composition based on Livy, book I.

In Mathematics: Algebra completed and Elementary Theory of Equations; Solid Geometry; Plane Trigonometry.

In English: Hunt's Discourse, pp. 19–150, or equivalent.

In French or German: The elements of one of these languages.

The studies of Sophomore year include the following required subjects: Latin, Greek, Mathematics, Mechanics, English, History, Chemistry, Zoology and Botany; and the following elective studies, of which two must be taken: Latin, Greek, Mathematics, French, German. While it is desirable that the candidate for the Junior year shall have some knowledge of Botany and Zoology, yet examination in these studies is not required.

The required studies of Junior year are Psychology, Physics, Logic, and Political Economy. Five elective studies in the first term and four in the second term are to be chosen from the departments of Philosophy, Language and Literature, Mathematics and Natural Science.

At the discretion of the Faculty, the Bachelor of Arts diploma of an approved College may be taken in place of the examination for entrance to the Senior year.

No person is admitted to the College as a candidate for the degree of Bachelor of Arts after the beginning of the first term of the Senior year.

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

Regular Examinations.—At the end of each term each class is ordinarily examined in the studies of that term. At the close of the second term the examination in certain subjects may embrace not only the work of that term, but the course of the entire year.

Partial Examinations and Written Recitations.—In addition to the regular examinations, partial examinations or written recitations are held from time to time during the term.

Divisional Examinations.—In the Freshman class, special examinations are held early in the first term, the results of which determine the distribution of the class into graded divisions. These are reorganized at the beginning of the second term according to the results of the last preceding regular examinations.

General Regulations.—Examinations are for the most part conducted in writing, but in certain subjects are oral in whole or in part. Private examinations are not allowed except in extreme cases and by special permission of the Faculty. Absence from an examination, except for reasons of absolute necessity, will be regarded as a serious delinquency.

Regulations Respecting Conditions and Absence from Examinations.

1. *Absence* from any examination, regular or special, counts as a failure.

Excuses for absence from examinations must be rendered in person to the Committee on Absences at their first meeting after the student returns to duty.

2. A student is likewise conditioned when *excluded* from an examination.

Rule—A student who is absent from more than one-sixth of the exercises of any course, and whose work is otherwise unsatisfactory, may be excluded by the instructor from the examination in that course.

8. A student who is conditioned in *half or more of his work for a term* is dropped from his class, and must either withdraw from College, or with permission of the Faculty enter the next lower class.

4. A student who receives conditions amounting to *less than half the work of a term* is given opportunity to remove them,—first term conditions in the fifth week of the second term, second term conditions in the first week of College in September.

5. A student who fails to remove his conditions at the first trial is granted a second opportunity—on first term conditions in the first week of College in September, on second term conditions in the sixth week of College. In case of Seniors the second opportunity on first term conditions will be given in June. For these examinations the student must employ a tutor and present a certificate of preparation and pay the fee of Section 8.

6. A student who fails at the second trial to remove conditions is required to repeat the courses in which he is deficient with the next lower class, and is enrolled with that class in the Catalogue until all deficiencies are made up.

7. A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next College year.

8. For every examination upon a deficiency after the first trial the student is required to pay a fee of $5 into the College treasury, to be applied to the Library Fund.

9. In the applications of these regulations, special cases, arising from illness or other causes, will be duly considered by the Faculty. Requests to be relieved from the operation of any of these regulations must be made in writing.

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the

student. The maximum mark in each study is one hundred; the minimum or passing mark is fifty.

Each instructor, after computing from recitations and examinations the marks of his classes, determines each student's rank by assigning him to one of certain groups into which the class is divided. These groups are constituted and numbered in order of merit—those students whose marks indicate the highest attainments being assigned to the first group, the next highest to the second group, and so on through the groups.

The general rank of a student is determined by combining his group numbers in the general courses in proportion to the allotted schedule time of each. Those students whose averages are highest, and above an established limit, are assigned to the first general group, those next highest to the second general group; and so on through the general groups.

In determining a student's standing, essays count as one hour per week throughout each of the four years. Account is taken of attendance and conduct as well as scholarship, according to the published rules of the Faculty.

A report of the standing of each student is made to his parent or guardian by the Registrar of the College at the close of the first term and at the close of the year. The latter report gives also the standing for the whole year.

GRADUATION.

Bachelor's Degree.

Students who pass their final examinations are ordinarily recommended by the Faculty for the degree of Bachelor of Arts, and if the recommendation is approved by the Trustees, the degree is conferred at Commencement, and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

No student will be recommended to the Trustees for a degree who fails to pass the examinations at the close of the last term of the Senior year.

Any member of the Senior class who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next College year.

Final Rank and Graduation Honors.

The final rank of members of the graduating class is computed by combining the averages for the several years of the course, except that the average for the Freshman year is omitted in those cases in which it would lower the standing of the student. The Faculty then determines what portion of the class shall be printed as the Honor List—the names of the members of each group being printed in alphabetical order. Special Honors in particular departments are also awarded.

The first and second general groups thus determined are the Honor groups of the graduating class, and are designated *magna cum laude* and *cum laude*, respectively.

The higher distinction of *insigni cum laude* and the highest, of *summa cum laude*, are reserved for very unusual excellence.

Commencement Speakers.

The student whose individual rank is highest, is ordinarily awarded the Latin Salutatory by vote of the Faculty. In like manner the student whose individual rank is the next highest receives the English Salutatory. The Valedictory is awarded with special regard to the qualifications of the student as a valedictorian, as well as on the ground of scholarship. Five others out of sixteen recommended by the Baird Prize Committee deliver English Orations, usually in the order of their scholarship.

In the award of all degrees and honors, regard is had to the conduct of the student during his course, and any student who has incurred serious discipline may be debarred from the rank to which otherwise his scholarship would have entitled him.

UNDERGRADUATE COURSE OF STUDY.

The course for the degree of Bachelor of Arts extends through four academic years and embraces instruction in the three departments of Philosophy, Language and Literature, Mathematics and Natural Science.

It includes two classes of studies, the required and the elective. The required studies are regarded as fundamental and essential in a liberal education and therefore are not left to the student's option. The elective studies, though important, are not all indispensable and accordingly are left, within definite limits, to the student's choice. Attendance upon all elective courses, when once chosen, as well as upon all required courses, is obligatory. In connection with some departments there are also optional courses, with voluntary attendance.

Most of the studies of the Freshman year are required, and include Latin, Greek, Mathematics, and English. The student elects between French and German. If he has fulfilled only the minimum requirement for entrance (20 or 21), he must continue the study of the language in which he was examined; if he has fulfilled the advanced requirement (22 or 23), he may either continue the study of that language, or begin the study of the other.

In the Sophomore year the studies are substantially all required. They include Latin, Greek, Mathematics, and English, continued from the Freshman year, and, in addition, General History, Mechanics, Chemistry, Zoology, and Botany. Opportunity is also given in elective courses in Latin, Greek, Mathematics, French, and German, for the student to extend his required work in any two of these directions.

In the Junior year the elective system more properly begins. About one-third of the student's time is occupied with required studies, which are Psychology and Logic, Political Economy, Physics. In addition to these the student chooses five elective

courses in the first term and four in the second term, some of them open only to Juniors and others to Juniors and Seniors.

In the Senior year the range of electives is wider, the required studies being Ethics and Evidences of Christianity. Besides these the student selects seven elective courses of study.

The various elective courses for Sophomores, Juniors and Seniors are detailed on the following pages.

To prevent confusion and secure intelligence of choice on the part of students, the electives are arranged systematically. As a rule no elective course is introduced until the student has passed through a required course in the same general department of study. The Sophomore electives are extensions of subjects already familiar to the student in the required courses, and the Junior and Senior electives, though largely new studies, are preceded by suitable required courses.

A further inducement to coherency in choice is found in the provision for Honors. Apart from the General Honors awarded for general excellence, there are Special Honors in the leading departments, in both required and elective studies. The effect of this is to concentrate choice upon cognate studies. The General and Special Honors are described after the Exhibit of Studies.

In the two lower years the instruction is conducted mainly by recitations. The Freshmen and Sophomores recite in four, five, six, or seven divisions, constituted according to rank and according to their degree of proficiency in the leading studies. They are divided separately for the classics, mathematics, and modern languages. As the work is thus proportioned to individual ability, rapid progress can be made by those who have special aptitude for certain studies.

Optional courses, so ordered as not to conflict with the time allotted to the regular instruction of the course, are offered in connection with several departments, under such restrictions as may be prescribed by the Faculty. These courses are designed to benefit those who wish to extend their reading or study in certain branches; they amplify the subjects taken up in the regular course, and in some cases conclude with a special examination upon which is based a certificate of proficiency. A student may take not more than two optional courses at one time; and only one course, if that course occupies more than two hours weekly.

In awarding the Bachelor's degree, and assigning the final rank, the student's work for the whole four years is taken into account.

REGULATIONS REGARDING THE CHOOSING OF ELECTIVES.

Students are required to choose their elective studies for the first term at the beginning of that term, and no changes will be allowed after the close of the third week, and none before that time, except for special reasons approved by the Faculty.

Students are required to hand in writing to the Registrar, on or before the third Monday in January, their choice of electives for the second term, and no changes will be allowed after that date, except for special reasons approved by the Faculty.

If a student be in the lowest group in any department he shall have liberty to choose his elective studies only in departments in which his previous standing has been above that group. If he desire any other elective studies he shall send in his proposed list of such studies to the Faculty for approval, and if his choice be not approved, the Faculty shall assign him his electives.

STATEMENT OF COURSES.

DEPARTMENT OF PHILOSOPHY.

Mrs. Robert L. Stuart, of New York, gave the College one hundred and fifty-four thousand dollars, to maintain professorships in the Department of Philosophy, embracing Ethics, Logic, Metaphysics, History of Philosophy and Psychology. She gave this in memory of her husband, the late Mr. Robert L. Stuart, and of his brother, the late Mr. Alexander Stuart.

The Professorships now established on this foundation are those of Psychology and History of Philosophy, Ethics, and Mental Science and Logic.

(In the following statements of courses, the numbers in brackets indicate the number of exercises a week.)

I. Moral and Religious Philosophy.

THE PRESIDENT AND PROFESSOR SHIELDS.

1. Ethics. Theoretical and practical ethics, the foundation of moral obligation, the will, conscience, the nature of virtue, and the

moral law. Recent ethical discussions. Lectures. Senior Required; first term [2]. The President. *Calderwood:* Handbook of Moral Philosophy.

2. Evidences of Christianity. An exhibition or outline of the exceptional evidence that accredits the Christian religion; to show that Christianity is and that anti-Christian systems are not capable of rational defence. Senior required; second term [1]. The President.

4. Harmony of Science and Religion. With a view to the scientific evidences of Christianity, and the purification and completion of philosophy. Senior Elective; second term [2]. Professor Shields. Lectures by the Professor, and extemporaneous essays by the student.

5, 6. (Latin 13, 14.) Lucretius, De Rerum Natura, and Cicero, De Natura Deorum. Senior Elective; both terms [2]. Professor Packard.

7, 8. Theism. Senior Elective; both terms [2]. The President.

9. Theoretical Ethics. Graduate course; first term [1]. The President.

10. Science and Religion. The history and the logic of the sciences with reference to emerging problems of religion. Graduate course; second term [2]. Professor Shields. Lectures.

II. Mental Philosophy.

PROFESSORS ORMOND, BALDWIN, AND HIBBEN, MR. WARREN, AND DR. HODGE.

1. Psychology. The elements of psychology, treating of the cognitive and motive powers. Junior required; first term [2]. Professor Ormond. Lectures and recitations. *McCosh:* Cognitive and Motive Powers. References to *James*, *Ladd*, and *Baldwin*.

2. Elements of Logic. The elements of formal logic. Junior Required; second term [3]. Professor Hibben. Lectures. *McCosh:* Manual.

3 I. History of Ancient Philosophy. Greek and Roman philosophy to close of Pagan Schools. Given 1895-96, alternating with 3 II. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures. *Zeller:* Outlines of Greek Philosophy; *Windelband:* History of Philosophy.

4 I. History of Medieval Philosophy, embracing the patristic and scholastic periods and ending with Francis Bacon. Given 1895-96, alternating with 4 II. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Ueberweg*, *Erdmann*, *Windelband*.

3 II. History of Modern Philosophy. Philosophy from Descartes to Kant. Given 1896-97, alternating with 3 I. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.

4 II. History of Modern Philosophy. Philosophy since Kant. Given 1896-97, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.

The courses 3 I, 4 I, 3 II, 4 II furnish a continuous course of lectures on historical philosophy running through two years.

6. Experimental Psychology. Introduction to the subject. The method, scope, and most general results of the experimental treatment of the mind, considered especially in its connection with general psychology, education, and medicine. Special demonstrations, in the laboratory, of the psychology of movement, general sensibility, touch, pleasure and pain, temperature-sense, taste, and smell. Junior Elective; second term [2]. Professor Baldwin and Mr. Warren. *Ribot:* German Psychology of To-day. *Sanford:* Course in Experimental Psychology.

A fee of $2 is charged to cover the cost of material used in the course.

8. (Greek 10.) The Protagoras of Plato, and lectures on the Platonic philosophy. Junior and Senior Elective; second term [2]. Professor Orris.

9. Symbolic Logic and Theory of Probability. Senior Elective; first term [2]. Professor Hibben. Lectures.

10. Induction, and Theory of Logic. Senior Elective; second term [2]. Professors Ormond and Hibben.

11. (Greek 13.) Aristotle, the Nicomachean Ethics, with prolegomena and dictations. Senior Elective; first term [2]. Professor Orris.

13. Metaphysics and Theory of Knowledge. Lectures. Senior Elective; first term [2]. Professor Ormond. *McCosh:* First and Fundamental Truths.

14. Outlines of Philosophy. A course in encyclopedia of philosophy. Senior Elective; second term [2]. Professor Ormond. Lectures.

15. Physiological Psychology. Lectures and laboratory work on the anatomy and physiology of the nervous system in their bearing upon the problems of psychology. Senior Elective; first term [2]. Professor Scott. *Ladd:* Physiological Psychology.

17. Experimental Psychology. A continuation of course 6, although independent in its topics. The psychology of the special senses (sight, hearing, touch, etc.) experimentally treated. The second half of this course treats of the higher processes, memory, association, action, thought, as far as they can be approached experimentally, with the theory of their physical basis. Senior Elective; first term [2]. Professor Baldwin and Mr. Warren. Lectures, demonstrations, and practical work in the laboratory required of all students in this course.

18. Experimental Psychology. Detailed treatment by lectures and demonstrations of the measurement of mental intensities (Weber's law) and of the results of mental chronometry. Senior Elective; second term [2]. Professor Baldwin and Mr. Warren. References: *Wundt*, *Ladd*, *Ribot*, *Jastrow*.

A fee of $5 is charged in each of courses 17 and 18 to cover the cost of material used.

19, 20. General Psychology. Advanced course. First term: Senses and Intellect; second term: Feeling and Will, with consideration of abnormal mental conditions. Senior Elective, open to graduates; both terms [2]. Professor Baldwin. References: *James*, *Sully*, *Ladd*, *Baldwin*.

21, 22. Selected Topics in Philosophy. Graduate course; both terms [2]. Professor Ormond. Lectures.

23, 24. (Greek 15, 16.) Plato; analyses of his dialogues, lectures on his philosophy, reading of the Phædo and parts of the Republic. Graduate course; both terms [1]. Professor Orris.

25, 26. Experimental Psychology. Consisting largely in research work. Graduate course; both terms [2]. Professor Baldwin and Mr. Warren.

27, 28. Modern and Contemporary Philosophy. Graduate Seminary; both terms [2]. Readings, discussions and theses. This course is also open as an elective to those Seniors who are candidates for Special Honors in Philosophy. Professor Ormond.

29, 30. Graduate Psychological Seminary. Open as an optional to Seniors of the first and second groups who elect 19 or 20; both terms [1]. Professor Baldwin. Subject for 1895–96: Social and Educational Psychology.

31. Theory of Mental Measurements. Graduate course; first term. Mr. Warren.

III. History and Political Science.

PROFESSOR SLOANE, MR. CONEY, AND MR. WYCKOFF.

1 a. (Latin 3b.) Roman History. Freshman Required; first term [1]. Mr. Browning.

1 b. (A portion of Greek 1, 3.) Greek History. Freshman Required; first term. Mr. Robbins and Mr. Prentice.

3. General History. Sophomore Required; first term [2]. Mr. Coney. *Freeman:* General Sketch of History.

5. a. Ancient Oriental History. b. Institutions of Greece and Rome. Lectures and discussions. Junior Elective; first term [2]. Professor Sloane.

6. a. Medieval History. b. European History to the end of the seventeenth century. Lectures and discussions. Junior Elective; second term [2]. Professor Sloane.

7. Constitutional and Political History of England since 1688. Senior Elective; first term [2]. Professor Sloane.

8. American Political History. Senior Elective; second term [2]. Professor Sloane.

a. The Science of History. Six lectures. Junior and Senior Optional; second term [1]. Professor Sloane.

9 I. The Nation. Its origin, nature, and functions. Given 1895–96, alternating with 9 II. Senior Elective; first term [2]. Professor Sloane.

9 II. The History of Political Theories. Given 1896–97, alternating with 9 I. Senior Elective; first term [2]. Professor Sloane.

10. Parliamentary and Congressional Government. Graduate course; second term [2]. Professor Sloane. *Bryce:* The American Commonwealth.

12. Historical Seminary. Open to Graduates and Senior Honormen; second term [2]. Professor Sloane.

14. Sociology. An historical review of the evolution of modern industrialism. A critical analysis of the principal theories of social reconstruction. The genesis and development of a science of sociology. A review of the methods and results of sociological study. Senior Elective and Graduate course; second term [2]. Mr. Wyckoff. Lectures and recitations.

IV. Jurisprudence and Political Economy.

PROFESSORS WILSON AND DANIELS.

2. Political Economy. The Elements of Economics. Junior Required; second term [3]. Lectures. Professor Daniels. *Mill:* Political Economy; or *Walker:* Political Economy.

3 I. Outlines of Jurisprudence: an exposition of Jurisprudence as an organic whole, exhibiting the nature of its subject-matter, its relationship to cognate branches of study, the inter-relationship of its several parts to each other, and their proper function and aim. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 3 II. Given 1895–96. Professor Wilson. *Holland:* Elements of Jurisprudence.

4 I. International Public Law. Text-book, lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 4 II. Given 1895–96. Professor Wilson. *Hall:* A Treatise on International Law, 3rd edition, 1890.

3 II. General Public Law: its historical derivation, its practical operation and sanction, its typical outward forms, its evidence as to the nature of the state and as to the character and scope of political sovereignty. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 3 I. Given 1896–97. Professor Wilson. *Boutmy:* Studies in Constitutional Law; *Wilson:* The State.

4 II. American Constitutional Law. Lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 4 I. Given 1896–97. Professor Wilson. *Cooley:* American Constitutional Law; and *A. V. Dicey:* The Law of the Constitution.

5. History of Law: in general, and as exhibited in the growth of typical national systems. Lectures and collateral reading. Restricted Senior Elective; first term [2]. Professor Wilson. *Maine:* Ancient Law.

Open only to Academic Seniors who take or have taken course 1. Those who wish to take this course are advised to consult with Professor Wilson before concluding their choice.

6. The Development of English Common Law: the genesis, growth, character, and general principles of English law. Lectures and collateral reading. Restricted Senior Elective; second term [2]. Professor Wilson.

Open only to Academic Seniors who have taken courses 1 and 5.

7, 8. (Latin 17, 18.) Roman Law. Readings, lectures, and recitations. Senior Elective, open to graduate students; both terms [2]. Professor Westcott. *Justinian:* Institutes.

9. Finance. An exposition of the principles of Public Finance, including monetary problems. Senior Elective; first term [2]. Lectures. Professor Daniels. *Bastable:* Public Finance.

10. History of Political Economy. Lectures and collateral reading. Senior Elective; second term [2]. Professor Daniels. *Ashley:* Economic Classics.

11, 12. (Latin 21, 22.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

V. Archæology and the History of Art.

PROFESSORS PRIME, MARQUAND, FROTHINGHAM, AND MR. BUTLER.

PUBLIC LECTURES: Provision will be made for a short course of public lectures by the professors of the department.

1. Ancient Art, a general course on the art of ancient Egypt, Assyria, Phœnicia, Greece, and Rome. Junior and Senior Elective; first term [2]. Professor Marquand. *Reber:* History of Ancient Art.

2. Medieval Art, a general course on early Christian, Romanesque, and Gothic art. Junior and Senior Elective; second term [2]. Professor Marquand. *Reber:* History of Medieval Art.

3. Greek and Roman Sculpture. Senior Elective and Graduate course; first term [2]. Professor Marquand. Lectures.

4. Renaissance and Modern Sculpture. Senior Elective and Graduate course; second term [2]. Professor Marquand. Lectures.

5. Early Christian and Romanesque Architecture. Senior Elective and Graduate course; first term [2]. Mr. Butler. Lectures.

6. Gothic and Renaissance Architecture. Senior Elective and Graduate course; second term [2]. Mr. Butler. Lectures.

Courses in Greek architecture, Greek Industrial Arts, Greek Mythology in Art, also in Christian Architecture, Gothic Architecture, the subjects and symbols of Christian Art, Medieval Industrial Arts, and Renaissance Architecture and Sculpture have been given and may be expected in future years.

DEPARTMENT OF LANGUAGE AND LITERATURE.

VI. Greek.

PROFESSORS CAMERON, ORRIS, AND WINANS, MR. ROBBINS AND MR. PRENTICE.

1, 3. Xenophon: Hellenica I–II. Greek Grammar and Composition. Greek History. Freshman Required; first term [4]. Mr. Robbins and Mr. Prentice. *Blake:* Hellenica. *Oman:* History of Greece.

2. Herodotus: Selections, Sight Reading. Freshman Required; second term [2]. Professor Winans and Mr. Robbins. *Merry:* Herodotus, and *Teubner text.*

4. Thucydides: Selections. Freshman Required; second term [2]. Mr. Prentice. *Marchant:* Thucydides II, and a text.

a. Extra and sight reading. Freshman Optional; part of both terms [1]. Mr. Prentice.

5a, 6a. Demosthenes: The Olynthiacs and Philippics, the life of Demosthenes and the political condition of Greece in his time. Plato: The Apology and Crito. Greek prose composition on the basis of the text read during the year. Sophomore Required; part of class, both terms [2]. Professor Orris.

5b. Xenophon: Memorabilia and Symposium. Sophomore Required; part of class, first term [2]. Professor Winans or Mr. Robbins. *Winans:* Memorabilia, Symposium.

6b. Lysias: Orations. The orators of the Canon. Sophomore Required; part of class, second term [2]. Mr. Robbins. *Bristol:* Lysias.

7. Euripides: Medea. Lectures on Greek drama and theatre. Sophomore Elective; first term [2]. Professor Cameron.

8. Lucian's Dialogues. Sophomore Elective; second term [2]. Professor Winans. *Williams:* Selections from Lucian.

9 I. Homer's Odyssey. Twelve books. Lectures. Given 1895-96, alternating with 9 II. Junior and Senior Elective; first term [2]. Professor Winans. *Merry:* Odyssey, or *German text.*

9 II. Aristophanes: two comedies. Lectures on comedy and on Aristophanes and his works. Given 1896-97, alternating with 9 I. Junior and Senior Elective; first term [2]. Professor Winans. *Merry:* Clouds (or Wasps). *Merry* or *Green:* Frogs.

10. (Ment. Phil. 8.) Plato: Protagoras, with lectures on the Platonic philosophy; or, Æschylus: Prometheus Vinctus or Agamemnon, with lectures on the Attic Drama. Junior and Senior Elective; second term [2]. Professor Orris.

11, 12. Sophocles: Œdipus Tyrannus. Greek Literature. Lectures. Senior Elective; both terms [2]. Professor Cameron.

13. (Ment. Phil. 11.) Aristotle: The Nicomachean Ethics, with prolegomena. Senior Elective; first term [2]. Professor Orris.

14. Greek Lyric Poets. Lectures. Senior Elective; second term [2]. Professor Winans.

15, 16. (Ment. Phil. 23, 24.) Plato: his life and works, analysis of his dialogues, lectures on his philosophy, reading of the Phædo and the Republic. Graduate course; both terms [1]. Professor Orris.

17, 18. Greek Historians. Critical study. Graduate course; both terms [2]. Professor Winans.

19, 20. Greek Dialects. Inscriptions and Homer. Graduate course; both terms [2]. Mr. Robbins. *Caner:* Delectus.

School at Athens.

This College, in connection with others, assisted in establishing and contributes to the support of the American School of Classical Studies at Athens. This school affords facilities for archæological and classical investigation and study in Greece, and approved graduates of this College are entitled to all its advantages free of tuition. Professor Sloane represents Princeton in its Managing Committee.

VII. Latin.

PROFESSORS PACKARD, WEST, AND WESTCOTT, MR. SMITH AND MR. CARTER.

1. Livy: Books I, XXI and XXII. Freshman Required; first term [3]. Professor Westcott and Mr. Smith. *Westcott:* Livy.

2. Terence: Andria, Adelphoe or Phormia. Aulus Gellius: selections. Freshman Required; second term [2]. Professor Westcott.

3. Latin Prose Composition. Freshman Required; first term [1]. Mr. Carter. Exercises based upon Livy.

4a. Cicero: De Senectute. Freshman Required; second term [1]. Mr. Smith. *Kelsey:* Cicero.

4b. Roman History. Freshman Required; second term [1]. Mr. Carter.

a. Sight reading of various authors. Freshman Optional; both terms [1]. Professor Westcott.

5a. Cicero: De Officiis, with occasional lectures. Sophomore Required; part of class, first term [2]. Professor Packard. *Chase and Stuart.*

5b. Horace: Odes. Sophomore Required; part of class, first term [2]. Mr. Carter. *Page:* Horace.

5c. Cicero's Letters, Epistolae Selectae. Sophomore Required; part of class, first term [2]. Mr. Smith. *Tyrrell:* Cicero in his Letters.

6a. Cicero: Tusculan Disputations. Sophomore Required; part of class, second term [2]. Professor Packard. *Chase and Stuart.*

6b. Horace: Odes. Catullus, selections. Sophomore Required; part of class, second term [2]. Mr. Carter. *Page:* Horace. *Simpson:* Selections from Catullus.

7a. Tacitus: Agricola. Martial, selections. Sophomore Elective; first term [2]. Mr. Smith. *Church and Brodribb:* Tacitus.

7b. The period of the Civil Wars, 49 to 31 B. C., studied from original sources. Honor course, restricted (substitute for 7a). Sophomore Elective; first term [2]. Professor Westcott.

8a. Quintus Curtius: History of Alexander the Great. Sophomore Elective; second term [2]. Mr. Smith. *Crosby:* Quintus Curtius.

8b. The Reign of Tiberius with special attention to the Annals of Tacitus and the Historia of Velleius Paterculus, and including an elementary course in Epigraphy. Honor course, restricted (substitute for 8a). Sophomore Elective; second term [2]. Professor Westcott. *Allen:* Tacitus. *Rockwood:* Velleius Paterculus.

b. Latin Prose Composition. Sophomore optional, both terms [1]. Professor Westcott.

9. Juvenal's Satires, and selected Letters of Pliny; lectures upon the moral and religious aspect of the Earlier Empire. Junior and Senior Elective; first term [2]. Professor Packard. Any accepted edition or text.

10. Seneca's Epistolæ ad Lucilium. Lectures continued, with added work and thesis on selected portions of Seneca's other writings. Junior Elective; second term [2]. Professor Packard. *Teubner text.*

12. Plautus: Trinummus, Mostellaria, Amphitruo, Menæchmi. Junior Elective; second term [2]. Mr. Carter.

13. (Moral Phil. 5.) Lucretius: De Rerum Natura, together with Cicero: De Natura Deorum, Book I; lectures illustrative of the subject. Senior Elective; first term [2]. Professor Packard. *Harper's texts.*

14. (Moral Phil. 6.) Cicero: De Natura Deorum, Books II, III, with selected readings from De Divinatione, and De Fato; lectures. Senior Elective; second term [2]. Professor Packard. *Harper's texts.*

15. Roman Oratory: Cicero: Brutus, and Quintilian: Institutio Oratoria. Senior Elective; first term [2]. Mr. Carter.

16. Early Latin Poetry. Lectures and recitations. Senior Elective; second term [2]. Mr. Carter. *Merry:* Selected Fragments of Roman Poetry. *Sellar:* The Roman Poets of the Republic.

17. (Jur. and Pol. Ec. 7.) Roman Law: lectures and recitations. Senior Elective, open to graduates; first term [2]. Professor Westcott. *Sohm:* Institutes of Roman Law.

18. (Jur. and Pol. Ec. 8.) Roman Law. Senior Elective, open to graduates; second term [2]. Professor Westcott. The Institutes of Justinian.

19, 20. Selections from Tertullian, Lactantius and Augustine. Graduate course; both terms [1]. Professor Packard.

21, 22. (Jur. and Pol. Ec. 11, 12.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

A seminary has been established by the Trustees in connection with the Latin department.

VIII. Sanskrit.

PROFESSOR WINANS AND MR. ROBBINS.

1, 2. Beginners' course. Grammar; exercises; easy reading, such as Nala, or the Sâvitri episode from the Mahâbhârata; Hitopadeça, etc. Comparison of forms. Senior Elective and Graduate course; both terms [2]. Professor Winans or Mr. Robbins. *Perry:* Primer, or *Geiger:* Elementarbuch; *Lanman:* Reader; *Whitney:* Grammar.

3, 4. A second year's course in Sanskrit with more extended reading, and with special attention to comparative grammar. Professor Winans.

5, 6. For students of Comparative Grammar a course is offered in Avestan and Old Persian. Graduate course [2]. Mr. Robbins. *Jackson:* Avesta Grammar and Reader. *Spiegel:* Die Alt-Persischen Keil Inschriften.

IX. English.

THE DEAN AND PROFESSORS HUNT AND PERRY.

1, 2. (Oratory 1, 2.) Elocution; combined with Rhetoric; Freshman Required; both terms [1]. Professor Perry.

4. Advanced Discourse and English Style. Lectures on the history and structure of the English Language. Sophomore Required; second term [2]. Professor Hunt. *Hunt:* Studies in Literature and Style; Principles of Discourse. *Champney:* History of English.

5. English Literature, historical and critical survey from Chaucer to Pope, lectures on representative authors. Junior Elective; first term [2]. Professor Hunt. *Hunt:* English Prose and Prose Writers. *Sweet:* Extracts from Chaucer. *Kitchin:* Spenser's Faerie Queene. *Macmillan:* Milton's Paradise Lost, Book I. *Hodgkins:* Milton's Lyrics.

6. English Literature. Writers from Pope to Wordsworth. Rise of the Romantic School. Junior Elective; second term [2]. The Dean.

7. Old English. Junior and Senior Elective; first term [2]. Professor Hunt. *Sweet:* Anglo-Saxon Reader. *Bright:* Anglo-Saxon Reader.

8. Old and Middle English. Junior and Senior Elective; second term [2]. Professor Hunt. *Morris and Skeat:* Specimens of Early English, Part II. *Skeat:* Chaucer (House of Fame). *Skeat:* Piers Plowman. *MacLean:* Old and Middle English Reader.

9. English Literature. English Literature from Cowper to Tennyson. Senior Elective; first term [2]. The Dean.

10. English Literature. The Elizabethan Drama. Marlowe, Ben Jonson, Shakespeare, Webster. Senior Elective; second term [2]. The Dean.

12. American Literature. Discussion of leading types and authors. Senior Elective; second term [2]. Professor Hunt. *Richardson:* American Literature. *Stedman:* Poets of America.

13. Gothic. Senior Elective; first term [2]. Professor Hunt. *Skeat:* Gospel of St. Mark in Gothic. *Braune:* Gothic Grammar.

14. Old English and Gothic. Lectures, historical and philological. Senior Elective; second term [2]. Professor Hunt. *Harrison and Sharp:* Beowulf. *Hunt:* Caedmon (Exodus and Daniel). *Heyne:* Ulfilas. *Kent:* Cynewolf's Elene.

15, 16. Advanced Old English and Gothic. Graduate course. Professor Hunt.

X. Oratory and Æsthetic Criticism.

PROFESSOR PERRY AND MR. COVINGTON.

1, 2. Elocution; combined with Rhetoric. Drill in gesture and vocal emphasis. Exercises in description and narration. Freshman Required; both terms [1]. Professor Perry and Mr. Covington. *Raymond and Miller:* The Speaker. *Raymond and Wheeler:* The Writer.

4. Argumentative Composition. Sophomore Required; second term. [Exercises at specified hours.] Mr. Covington.

6. Oratorical Composition and Delivery. Junior Optional; second term. [Exercises at specified hours.] Professor Perry.

7. Oratorical Composition and Delivery. Senior Optional; first term. [Exercises at specified hours.] Professor Perry.

There are public contests for various prizes in oratory, poetry and disputation. (See heading "Prizes and Competitive Scholarships.")

9. Poetics. Lyric, narrative and dramatic poetry will be studied as forms of expression, with especial reference to the metres of English lyric poetry, and to the technic of the drama. Senior Elective; first term [2]. Professor Perry.

10. Prose Fiction. An analysis will be made of character-delineation and plot as exhibited in representative novels, followed by a comparative study of the schools of modern fiction. Senior Elective; second term [2]. Professor Perry.

11. Influence of the French Revolution upon English poetry. Graduate course; first term [1]. Professor Perry.

XI. Exercises in English Composition.

In addition to the exercises in narration and description, disputation and oratory, prepared in connection with the courses *indicated* under IX and X, extended essays and other forms of composition are required in the Freshman, Sophomore and Junior years, and in many of the elective courses open to Seniors. They are prepared under the supervision of the professors of English literature, discourse and oratory, and are carefully examined and corrected. In every year of the course several prizes or honorary appointments are given for excellence in essay writing and in public address, either by the College, or by the Cliosophic or American Whig Societies, acting through committees appointed from their own members in the Faculty. (See heading "Prizes and Competitive Scholarships.")

XII. German.

PROFESSOR HUMPHREYS AND DR. HOSKINS.

1, 2. Elements of Grammar. Exercises in composition. Reading. Freshman Elective (Required for those not taking German 3, 4; 5, 6; or French). Both terms [2]. Dr. Hoskins. *Whitney:* Brief German Grammar. *Whitney:* Introductory German Reader.

3, 4. Intermediate Course in grammar, composition, and reading. Freshman Elective (open to those who have passed the elementary examination for admission: required for those not taking German 1, 2; 5, 6; or French). Both terms [2]. Professor Humphreys or Dr. Hoskins. *Whitney:* Compendious German Grammar. *Whitney:* Introductory German Reader. *Bronson:* German Prose and Poetry. *Leander:* Träumereien.

5, 6. Advanced Course in grammar, syntax, composition, and reading. Freshman Elective (open to those who have passed the advanced examination for admission: required for those not taking German 1, 2; 3, 4; or French). Both terms [2]. Dr. Hoskins. *Whitney:* Compendious German Grammar. *Harris:* German Composition. *Storm:* Immensee. *Heyse:* Die Blinden. *Freytag:* Die Journalisten.

7, 8. Modern German Prose and Poetry. Composition and syntax. Sophomore Elective (open to those who have passed German 1, 2 or 3, 4). Both terms [2]. Professor Humphreys. *Whitney:* Compendious German Grammar. *Harris:* German Composition. *Riehl:* Burg Neideck, Der stumme Ratsherr. *Auerbach:* Auf Wache. *Schiller:* Wilhelm Tell, Lyric Poems.

9, 10. Schiller's Life and Works. Composition. Sophomore Elective (open to those who have passed German 5, 6). Both terms [2]. Professor Humphreys. *Schiller:* Ausgewählte Werke. *v. Jagemann:* Materials for Composition.

11, 12. Lessing's Life and Works. Junior Elective; both terms [2]. Dr. Hoskins.

13, 14. Goethe's Life and Works. Senior Elective; both terms [2]. Professor Humphreys.

15. Old High German. Grammar, reading, studies in word-forms. Requires a knowledge of modern German; knowledge of Gothic useful. Restricted Senior Elective and Graduate Course; first term [2]. Dr. Hoskins. *Braune:* Althochdeutsche Grammatik, and Althochdeutsches Lesebuch.

16. Middle High German. Grammar, lectures and reading. Restricted Senior Elective and Graduate Course, open only to those proficient in modern German; second term [2]. Professor Humphreys or Dr. Hoskins. *Paul:* Mittelhochdeutsche Grammatik. *Bartsch:* Das Nibelungenlied, Walther von der Vogelweide.

18. Old Saxon. Grammar and reading. Graduate Course; second term [2]. Dr. Hoskins. *Gallée:* Altsächsische Grammatik. *Behaghel:* Heliand.

For courses in Gothic and Anglo-Saxon see announcement of the English Department.

XIII. French.

PROFESSORS HARPER AND LEWIS, AND MR. VREELAND.

1a, 2a. Elementary French. Freshman Elective (Required for those not taking French 1b, 2b or German 1, 2); both terms [2]. Professor Harper, or Mr. Vreeland.

1b, 2b. French. Freshman Elective (substitute for French 1a, 2a, open to those who have passed the advanced entrance requirement in French); both terms [2]. Professor Harper, or Mr. Vreeland.

3. Advanced French. Sophomore Elective; first term [2]. Professor Harper, or Mr. Vreeland. *Balzac:* Harper and Livingood's Selections. *Dumas:* Les Trois Mousquetaires; outside reading and composition.

4. Advanced French. Sophomore Elective; second term [2]. Professor Harper, or Mr. Vreeland. *La Fontaine:* Fables. *Daudet:* Lettres de Mon Moulin.

5 I. French Literature. Lectures on medieval and renaissance periods and 17th century drama. Course for 1895–96, alternating with 5 II. Junior and Senior Elective; first term [2]. Professor Harper. *Voltaire:* Siècle de Louis XIV. *Corneille:* Cid.

6 I. French Literature. Lectures on principal authors of 17th century. Course for 1895–96, alternating with 6 II. Junior and Senior Elective; second term [2]. Professor Harper. *Molière:* Le Misanthrope. *Duc de St. Simon:* Mémoires.

5 II. French Literature. Lectures on principal authors of the 18th century. Collateral reading. Course for 1896–97, alternating with 5 I. Junior and Senior Elective; first term [2]. Professor Harper. *Beaumarchais:* Le Barbier de Séville. *Musset:* Fantasio and On ne badine pas avec l'Amour. *Hugo:* Hernani.

6 II. French Literature. Lectures on 19th century authors. Collateral reading. Course for 1896–97, alternating with 6 I.

Junior and Senior Elective; second term [2]. Professor Harper. *Augier:* Comedies. *Balzac:* Eugénie Grandet.

7. Medieval French Literature. Lectures, themes and collateral reading. The chronicles of *Villehardouin*, *Joinville*, and *Froissart*. Graduate course; first term [2]. Professor Harper.

8. Medieval French Literature. Lectures, themes and collateral reading. The development of lyric poetry. *Charles D'Orléans*, *Villon*. Graduate course; second term [2]. Professor Harper.

9, 10. French Literature of the Renaissance. Lectures, themes and collateral reading. *Commines*, *Marot*, *Rabelais*, *Ronsard*, *Montaigne*, *Amyot*. Graduate course; both terms [2]. Professor Harper.

11, 12. Old French Readings. Senior Elective; both terms [2]. Professor Lewis. This course is intended to give the student a good reading knowledge of Old French, as well as to acquaint him with the literature of the period. *Gaston Paris:* Extraits de la Chanson de Roland is first read, then *Suchier:* Aucassin et Nicolete, *Warnke:* Die Lais de Marie de France, *Koschwitz:* Karls Reise, and *Foerster:* Cligès.

13, 14. Old French Philology. Graduate course; both terms [2]. Professor Lewis. The lectures on Old French etymology and morphology, given in this course, bear mainly on the subject-matter contained in *Schwan:* Grammatik des Altfranzösischen and *Suchier:* Le français et le provençal.

15. Physiological Phonetics. Graduate course; first term [2]. Professor Lewis. This course consists entirely of lectures, at first on general physiological phonetics, and later on French phonetics; the required books are: *Sweet:* A Primer of Phonetics, *Beyer:* Französische Phonetik, and *Passy:* Le français parlé.

16. French Dialects. Graduate course; second term [2]. Professor Lewis. Lectures are given on the Franco-Norman and the Anglo-Norman dialects, and deal first with old Norman texts, and, later, with the modern patois of Normandy and the Channel Islands.

17, 18. Old French Text Criticism. Graduate course; both terms [2]. Professor Lewis. The object of this course is to teach the student how to edit an old French text from the manuscript.

XIV. Italian.

PROFESSOR HARPER.

1. Elementary Italian. Junior and Senior Elective; first term [2]. *Grandgent:* Grammar. Modern short stories.

2. Dante: Inferno. Junior and Senior Elective; second term [2].

3. Dante: Purgatorio. Senior Elective; first term [2].

4. Dante: Paradiso. Senior Elective; second term [2].

5, 6. Dante and his age. Lectures, themes and collateral reading on Dante's predecessors and contemporaries, and his Italian works other than the Divina Commedia. Graduate course; both terms [2]. Professor Harper.

XV. Spanish.

PROFESSOR LEWIS.

1, 2. Modern Spanish. Junior and Senior Elective; both terms [2]. Professor Lewis. First, *Edgren:* Spanish Grammar, and then *Partier á tiempo*, *Tu amor ó la muerte*, *Un desafio* and *El Indiano* are read; these plays are followed by *Caballero:* La Familia de Alvareda.

XVI. Biblical Literature.

THE PRESIDENT, PROFESSORS HIBBEN AND PATTON AND MR. MARTIN.

1, 2. Introduction to the New Testament. Freshman Required; both terms [1]. Professor Patton.

3. The Pauline Epistles. Sophomore Required; first term [1]. The President.

5. Hebrew Poetry. Junior and Senior Elective; first term [2]. Professor Hibben.

6. Ethical Teachings in the New Testament Junior and Senior Elective; second term [2]. Professor Hibben.

7, 8. Hebrew. Elementary course. Grammar and exercises, and reading easy portions of Old Testament. Senior Elective, open to graduates; both terms [4]. Mr. Martin. *Green:* Elementary Hebrew Grammar.

DEPARTMENT OF MATHEMATICS AND NATURAL SCIENCE.

XVII. Mathematics.

PROFESSORS DUFFIELD, FINE, AND THOMPSON, MR. HINTON, AND MR. WILSON.

1a. Solid and Spherical Geometry and Mensuration. Freshman Required; first term [3]. Professor Thompson, Mr. Hinton, or Mr. Wilson.

2a. Trigonometry. Freshman Required; second term [3]. Professor Thompson, Mr. Hinton, or Mr. Wilson. *Wells:* Plane and Spherical Trigonometry.

3. Selected portions of Algebra. Freshman Required; first term [1]. Professor Thompson. *Wells:* College Algebra.

4. Elementary Theory of Equations. Freshman Required; second term [1]. Professor Thompson. *Wells:* College Algebra.

1b, 2b. Trigonometry and Theory of Equations, advanced course. Open only to those who have passed the maximum mathematics for entrance. Freshman Elective (substitute for 1a or 2a); both terms [3]. Professor Thompson.

5. Conic Sections, treated from the Cartesian standpoint. Sophomore Required; first term [3]. Professor Fine, Mr. Hinton, or Mr. Wilson. *C. Smith:* Conic Sections (Chapters I–IX).

7, 8. Differential and Integral Calculus. Sophomore Elective; both terms [2]. Professor Fine. *Osborn:* Differential and Integral Calculus.

9, 10. Calculus and Elementary Differential Equations. Junior and Senior Elective; both terms [2]. Professor Fine. Lectures. *W. Johnson:* Differential Equations.

11. Analytic Geometry of Three Dimensions; the plane, straight line, and quadric surface. Junior and Senior Elective; first term [2], alternating with 15. Given 1895–96. Professor Thompson. *C. Smith:* Solid Geometry.

12. Analytic Geometry of Three Dimensions; theory of surfaces and curves. Junior and Senior Elective; second term [2], alternating with 16. Given 1895–96. Professor Thompson. Lectures. *C. Smith:* Solid Geometry.

14. (Physics 6). **Analytical Mechanics. Junior and Senior Elective; second term [2]. Professor Magie.**

15, 16. **Higher Plane Curves. Senior Elective; both terms [2], alternating with 11, 12. Given 1896–97. Professor Thompson.**

17. **Theory of Functions, elementary course. Senior Elective and Graduate course; first term [2]. Professor Fine. Lectures.**

18. **Elliptic Functions. Senior Elective and Graduate course; second term [2]. Professor Fine.**

19, 20. **Differential Equations, general course, embracing Lie's transformation theory. Graduate course; both terms [2]. Mr. Brooks.**

21, 22. **Theory of Numbers and Higher Algebra, including theory of substitutions and the arithmetical theory of the algebraic equation. Graduate course; both terms [2]. Professor Fine. Lectures.** *Dirichlet-Dedekind:* **Zahlentheorie.**

23, 24. **Higher Metrical Geometry. Graduate course; both terms [2]. Professor Fine.** *Darboux:* **Leçons sur la Theorie des Surfaces.**

XVIII. Astronomy.

PROFESSORS YOUNG AND REED.

1. **Elementary Astronomy. Lectures, recitations from text book. Junior Elective; first term [2]. Professor Young.** *Young:* **Elements of Astronomy.**

3. **General Astronomy. Extended course—Astronomical instruments and methods; the determination of the principal astronomical constants; eclipses; undisturbed planetary motion; spectroscopic astronomy. Lectures and recitations. Senior Elective; first term [2]. Professor Young.** *Young:* **General Astronomy.**

5, 6. **Practical Astronomy. Determination of time, latitude, azimuth, and the positions of planets or comets. Spectroscopic observation of the sun. Recitations and observatory work. Senior Elective; both terms [2]. Professor Reed.** *Campbell:* **Practical Astronomy.** *Chauvenet:* **Practical Astronomy.**

7, 8. **Theoretical Astronomy and the calculation of orbits. Graduate course; both terms [1]. Professors Young and Reed.** *Watson:* **Theoretical Astronomy.** *Oppolzer:* **Bahn-bestimmung.** *Klinkerfues:* **Theoretische Astronomie.**

9, 10. Practical Astronomy. The same as courses 5, 6, but with additions. Recitations and observatory work. Open to graduates who did not take it in Senior year; both terms [2]. Professor Reed. *Campbell:* Practical Astronomy. *Chauvenet:* Practical Astronomy.

XIX. Physics.

PROFESSORS BRACKETT AND MAGIE, MR. WATERMAN AND DR. LOOMIS.

2. Elementary Mechanics; mechanics of masses and molecular mechanics. Sophomore Required; second term [2]. Professor Magie and Dr. Loomis. *Selby:* Elementary Mechanics.

3. General Physics; molecular mechanics, sound, heat, electricity, light. Recitations and experimental lectures. Junior Required; first term [3]. Professor Magie. *Anthony and Brackett:* Elementary Text-Book of Physics.

4 I. Theory of Heat, with lectures on thermodynamics and on van der Waal's theory of a gas. Given 1895–96, alternating with 4 II. Junior and Senior Elective; second term [2]. Professor Magie. *Maxwell:* Theory of Heat.

4 II. Theory of Light, with experimental demonstrations. Given 1896–97, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Magie. *Preston:* Theory of Light.

6. Analytical Mechanics. (Math. 14.) The elements of the subject, open to those who have taken Mathematics 9. Junior and Senior Elective; second term [2]. Professor Magie. *Ziwet:* Theoretical Mechanics.

7. Practical Physics; experimental work in mechanics and heat, with collateral lectures and recitations. Senior Elective; first term [2]. Mr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. I.

8. Practical Physics, experimental work in electricity, with lectures on the theory of electrical measurements. Senior Elective; second term [2]. Mr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. II.

9. Theory of Electricity; open to those who have taken Mathematics 9, 10. Senior Elective; first term [2]. Professor Magie. *Emtage:* Electricity and Magnetism.

11, 12. Laboratory Practice; advanced measurements and special investigations in heat, light, electricity and magnetism. Graduate course; both terms. Professor Magie and Mr. Waterman. (The physical laboratory is open throughout the week to graduate students.)

13, 14. Mathematical Physics; heat, light, electricity and magnetism. Graduate course, (given on application); both terms [2]. Professor Magie.

XX. Chemistry.

PROFESSORS CORNWALL AND MCCAY, AND MR. NEHER.

2. General Chemistry: experimental lectures and written recitations. Sophomore Required; second term [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

3. General Chemistry. Organic and theoretical chemistry. Junior Elective; first term [2]. Professor McCay. *Remsen:* Organic Chemistry. *Remsen:* Theoretical Chemistry.

5. Laboratory Chemistry: lectures, recitations and laboratory work; on qualitative analysis of simple salts; experimental chemistry; sugar, milk, drinking water, poisons, and the more important organic compounds. Senior Elective (open only to those who have taken course 3); first term [2]. Professor Cornwall and Mr. Neher.

7. Organic Chemistry, fatty series. Lectures. Graduate course; first term [4]. Given 1895–96. Mr. Neher. *Meyer und Jacobson:* Lehrbuch der Organischen Chemie.

XXI. Physical Geography.

PROFESSOR LIBBEY.

2. Physical Geography. Physical geography proper; morphology of the continents, oceanography, climatology. Senior Elective; second term [2]. Professor Libbey. *Guyot:* Physical Geography.

4. Physical Geography. The relations of physical geography to the history of mankind. Graduate course (open to those who have taken geology and physical geography); second term [1]. Professor Libbey.

XXII. Geology.

PROFESSOR SCOTT.

2. Geology, elementary course; general outline of the subject, including dynamical, structural and historical geology. Junior Elective, except for those who elect 3, 4; second term [2]. Professor Scott. *Geikie:* Class Book of Geology.

3 I, 4 I. Physical Geology. Advanced course in dynamical and structural geology, with provision for laboratory and field work. Given 1895–96 (alternating with 3 II, 4 II). Junior and Senior Elective; both terms [2]. Professor Scott. *Green:* Geology for Students. *Dana:* Manual of Geology, new ed. This course is open only to those who have taken Biology 15, Mammalian Anatomy.

3 II, 4 II. Historical Geology. Advanced course; the detailed study of the formations, their stratigraphy, palæontology, distribution and economic products. Given 1894–95, (alternating with 3 I, 4 I). Junior and Senior Elective; both terms [2]. Professor Scott. *Dana:* Manual of Geology. *Kayser:* Text Book of Comparative Geology.

XXIII. Biology.

PROFESSORS MACLOSKIE, SCOTT, LIBBEY, RANKIN AND MCCLURE.

1. Elements of Zoology and Botany. Lectures on general botany, with practical work in the examination of plants, followed by lessons in zoology. Sophomore Required; first term [2]. Professors Macloskie and Rankin. *Macloskie:* Elementary Botany. *Packard:* Elementary Zoology.

3. General Biology. Lectures on the principles of biological science, with laboratory work. Junior Elective; first term [2]. Professors Macloskie and Rankin. *Dodge:* Elementary Practical Biology.

4. Practical Botany. Laboratory work in vegetable anatomy, histology, and medical botany. Junior Elective; second term [2]. Professors Macloskie and Rankin. *Bower:* Practical Botany. *Spalding:* Introduction to Botany.

6. Vertebrate Anatomy. Lectures and dissections of vertebrates. Junior Elective; second term [2]. Professor McClure.

Marshall and Hurst: Practical Zoology. *Wiedersheim:* Comparative Anatomy of Vertebrates. *Huxley:* Comparative Anatomy of Vertebrates.

8. Invertebrate Morphology. Junior Elective; second term [2]. Professor Macloskie.

10. Normal Histology. Lectures, demonstrations and laboratory practice in microscopical anatomy. Junior and Senior Elective; second term [2]. Professor Libbey. *Schaefer* and *Prudden.*

11. Comparative Osteology. Lectures and study of skeletons in the museum. Only for students contemplating the medical profession. Senior Elective; first term [2]. Professors Macloskie and Scott. *Flower:* Osteology of the Mammalia. *Parker and Bettany:* Morphology of the Skull.

12. Practical Histology. Practical work in hardening, injection, section cutting, etc., involved in histology. Senior Elective (open only to those who have taken 10 in the Junior year); second term [2]. Professor Libbey. *Whitman.*

13. Physiology. Lectures on methods and results, including the functions of the body in health and disease. Senior Elective; first term [2]. Professor Macloskie. *Martin:* Human Body. *Foster:* Physiology.

14. Embryology, practical work and lectures. Senior Elective; second term [2]. Professor McClure. *Foster and Balfour:* Elements of Embryology. *Hertwig:* Embryology. *Minot:* Human Embryology.

15. Mammalian Anatomy. Senior Elective; first term [2]. Professor McClure.

16. Palæontology; morphology of the extinct vertebrates and phylogeny of existing forms. Senior Elective; second term [4]. Professor Scott. *Huxley:* Anatomy of Vertebrates.

Students entering for *Special Honors in Biology* must have attained a rank equivalent to second group in 1, or qualify themselves by a special examination for this rank, and pursue 8–14 inclusive under the usual regulations of Special Honor work. In place of the separate theses in the Senior courses, the student may select a thesis from one of the courses, which must show a higher standard of work. To fill the six hours elective work Seniors must elect Chemistry 5, or Physics 7.

In course 6 a fee of $4.50 is charged for the use of laboratory instruments, reagents and material, subject to a drawback.

In courses 10 and 12 a fee of $10 is charged to cover mounting material, slides, etc., as each student retains the set of specimens prepared as his own.

Students who contemplate entering the medical profession may combine the Electives in Biology and Chemistry, so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges which have a four years' course.

EXHIBIT OF STUDIES FOR 1895–96.

NOTE.—The numbers indicate hours per week.
Each elective course takes two hours weekly, except in special cases.

FRESHMAN YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin,	4	Latin,	4
Greek,	4	Greek,	4
Mathematics,	4	Mathematics,	4
Bible,	1	Bible,	1
English,	1		
	14 hours.		13 hours.

ELECTIVE.

(Student to take one Elective—2 hours.)

German,	2	German,	2
French,	2	French,	2
	16 hours.		15 hours.

SOPHOMORE YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin,	2	Latin,	2
Greek,	2	Greek,	2
Mathematics,	3	English,	2
History,	2	Chemistry,	2
Zool. and Bot.,	2	Mechanics,	2
Bible,	1		
	12 hours.		10 hours.

ELECTIVE.

(Student to take two Electives—4 hours.)

Latin,	2	Latin,	2
Greek,	2	Greek,	2
Mathematics,	2	Mathematics,	2
French,	2	French,	2
German,	2	German,	2
	16 hours.		14

JUNIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Physics,	3	Logic,	3
Psychology,	2	Political Economy,	3
	5 hours.		6 hours.
Five Electives,	10 hours.	Four Electives,	8 hours.
	15 hours.		14 hours.

JUNIOR ELECTIVE COURSES.

The Elective Courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Juniors only.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy*
	Plato (*Greek* 10)
	Exper. Psych.
HISTORY, JURISPRUDENCE AND POLITICS.	
History, III 5	History, III 6
Outlines of Jurisprudence	*International Public Law*
ARCHÆOLOGY AND ART.	
Art 1	*Art* 2
CLASSICS.	
Greek 9	*Plato*
Juvenal	Seneca
	Plautus

ENGLISH.

English 5	English 6
Old English, IX 7	*Middle English* IX 8

MODERN LANGUAGES.

German 11	German 12
French 5	*French* 6
Italian 1	*Italian* 2
Spanish 1	*Spanish* 2

BIBLE.

Bible 5	*Bible* 6

MATHEMATICS.

Mathematics 9	*Mathematics* 10
Mathematics 11	*Mathematics* 12
	Anal. Mech.

PHYSICAL SCIENCE.

Astronomy 1	*Anal. Mech.*
Theor. Chemistry	*Physics* 4

NATURAL SCIENCE.

Biology 8	Biology 4
Geology 8	*Geology* 4
	Geology 2
	Histology, XXIII 10
	Vert. Anatomy XXIII 6
	Invertebrate Morphology 8

JUNIOR ELECTIVE EXCLUSIONS.

In the list of Junior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
{ *Jurisprudence*	{ *Intern. Law*
{ *Art* 2	{ *Art* 2
{ Astronomy 1	{ Geology 2
{ *Spanish* 1	{ *Spanish* 2
	{ *Solid Geometry*
	{ *Mid. English.*
	{ Vert. Anat. 6

English Lit. 5	English Lit. 6 Invert. Morph.
Hist. of Phil.	*Hist. of Phil.*
Ancient History *Bible*	Medieval History *Bible*
Theoretical Chemistry 8 *Juvenal* 9 *Old English*	Seneca 10 Pract. Bot. 4
Aristophanes, Odyssey	Exp. Psychology
Biology 8 *Diff. Equations*	*Plato* 10 *Diff. Equations*
German	German
Geology 8	*Geology* 4 *Anal. Mech.* 6 Plautus
Italian 1	*Italian* 2 *Physics* 4 *Histology* 8
French Lit.	French Lit.

SENIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Ethics,	2 hours.	Ev. of Christianity,	1 hour.
Six Electives,	12		12 hours.
	14 hours.		13 hours.

ELECTIVE COURSES.

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Seniors only.

SENIOR ELECTIVE COURSES.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy*
Advanced Logic	Advanced Logic
Physiological Psychology	Science and Religion
Aristotle	*Plato*
Theism	Theism
Metaphysics	Outlines of Philosophy

Experimental Psychology	Experimental Psychology
General Psychology	General Psychology
Lucretius	Lucretius
Mod. Phil., restricted.	Mod. Phil., restricted.

HISTORY, JURISPRUDENCE AND POLITICS.

History	History
Jurisprudence 3	*Jurisprudence* 4
Jurisprudence 5	Jurisprudence 6
Roman Law	Roman Law
Finance	History of Pol. Econ.
Hist. of Pol. Theories 9	

ARCHÆOLOGY AND ART.

Art 1	*Art* 2
Art 3	Art 4
Art 5	Art 6

CLASSICS (WITH SANSKRIT).

Sanskrit 1	Sanskrit 2
Greek 9	*Greek* 10
Greek 11	Greek 12
Greek 13	Greek 14
Latin 9	
Latin 13	Latin 14
Latin 15	Latin 16
Roman Law	Roman Law

ENGLISH.

English Literature	English Literature
Old English	*Middle English*
Gothic	Old English
Poetics	Prose Fiction
	American Literature

MODERN LANGUAGES.

German 13	German 14
Old High German 19	Mid. High German 20
French Literature	*French Literature*
Old French	Old French
Italian 1	

Italian 8	*Italian* 2
Spanish 1	Italian 4
	Spanish 2

BIBLE.

Bible 5	*Bible* 6
Hebrew 7	Hebrew 8

MATHEMATICS.

Mathematics 9	*Mathematics* 10
Mathematics 11	*Mathematics* 12
Mathematics 15	Mathematics 16
Mathematics 17	Mathematics 18
	Analytical Mechanics

PHYSICAL SCIENCE.

Astronomy 3	*Analytical Mechanics*
Practical Astronomy	Practical Astronomy
Physics 9	*Physics* 4
Practical Physics	Practical Physics

NATURAL SCIENCE.

Laboratory Chemistry	Physical Geography
Geology 3	*Geology* 4
Physiology 13	Embryology
Compar. Osteology	*Histology* 10
Mammalian Anatomy	Practical Histology 12
	Palæontology

Senior Elective Exclusions.

In the list of Senior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
{ Gothic Comp. Pol. 7 Higher Plane Curves Osteology	{ Embryology Latin 16 Higher Plane Curves Palæontology
Quintilian	{ American Lit. Phys. Geog.
{ *Jurisprudence* *Art* 1	{ *Intern. Law* *Art* 2 Old French

Theism	Theism
Practical Physics	Practical Physics
Spanish 1	*Spanish* 2
Sanskrit	
Old French	*Middle English*
Greek 11	Greek 12
Geometry 11	*Geometry* 12
Mammalian Anatomy	Histology 10
Hebrew	
Lucretius	Cicero 14
Art 3	Art 6
Astronomy 3	English Com. Law
History of Law	
Physiology	Hebrew
Aristotle	Sanskrit
	Outlines of Philosophy
	Palæontology
	Latin 16
History of Philosophy	*History of Philosophy*
Lab. Chemistry	
German 7	German 8
Bible	*Bible*
	Palæontology
Adv. Exp. Psychology	Adv. Exp. Psychology
History	History
Theory of Functions	Theory of Functions
Juvenal	
Old English	
Finance	History of Pol. Econ.
Mid. High German	Mid. High German
Physiology	*Plato*
Differential Equations	*Differential Equations*
Hebrew	
Art 5	Art 4
Advanced Logic	Advanced Logic
Italian 3	Science and Religion
Odyssey	

Old High German Metaphysics *Geology* 3	Italian 4 Hebrew *Anal. Mechanics* *Geology* 4
Physiological Psychology *Italian* 1 Eng. Lit. 9 Physics 9	*Histology* 8 *Physics* 4 *Italian* 2 English Literature 10
English Literature	Palæontology Greek 14
French Literature Aristotle	French Literature
Roman Law Practical Astronomy Poetics Advanced Gen. Psychol.	Roman Law Practical Astronomy Prose Fiction Advanced Gen. Psychol.

REGULATIONS FOR GENERAL AND SPECIAL HONORS.

Honors are of two kinds, General and Special, and in each kind there are two degrees of distinction, High Honors and Honors. In very exceptional cases the Faculty may also bestow the further distinction of Highest Honors, either General or Special.

I. General Honors are awarded for general excellence in studies at the close of each academic year, according to the following provisions:—At the close of the Freshman, Sophomore and Junior years, High General Honors are given to those whose average rank for the year is within the First General Group, and General Honors to those whose average rank for the year is within the Second General Group. At graduation, High General Honors are given to those whose final average rank for the whole academic course is within the First General Group, and similarly General Honors to those within the Second General Group.

II. Special Honors are awarded for excellence in single leading departments of study at the close of the Sophomore year and at

graduation, according to the following provisions: The Second-Year Special Honors at the close of the Sophomore year, are given in the following departments: Latin, Greek, Mathematics. Only those whose average rank for the year in all their Sophomore courses is not below the Third General Group, are eligible for Second-Year Special Honors. Such of these as maintain a first group rank in the Freshman and Sophomore courses belonging to the department in which Special Honors are sought, receive High Honors, and similarly those who maintain a second group rank receive Honors.

The Final Special Honors are awarded at graduation in the following departments: 1. Philosophy; 2. History, Jurisprudence and Politics; 3. Archæology and Art; 4. Classics; 5. Modern Languages; 6. English; 7. Mathematics; 8. Physical Science; 9. Natural Science. Only those whose final average rank for the whole academic course is not below the Third General Group are eligible for Final Special Honors. Such of these as maintain a first group standing in at least nine of any ten courses in one of the above departments, pursuing four of these courses in Junior year, and six in Senior year, receive High Honors, and the others who maintain an average first group rank in their ten courses receive Honors.

In departments where less than ten Junior and Senior courses are available for Special Honors, the necessary number of additional courses must be taken from a cognate department.

Students who intend to study for Special Honors shall give written notice of their intention to the Registrar, when they hand in their lists of electives at the beginning of Sophomore or Senior year.

ACADEMIC FRESHMAN FIRST TERM SCHEDULE.—1895–96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		II, V Bible I French [4 IV German [3	III, VI Bible II French [4 IV German [3	I, IV Bible III French [4 VI German [3	I Latin 1 γ [13 III Latin 3a ε [3 V Latin 1 δ [14	I Latin 1 γ [13 III Latin 1 δ [14 V Latin 3a ε [3
9	I Math 1 β [10 IV Math 1 δ [10½	III French [4 VI German [3	I French [4 V German [3	II French [4 V German [3	II Latin 1 γ [13 IV Greek δ [2 VI Latin 1 δ [14	II Latin 1 γ [13 IV Greek ε [8 VI Latin 3a ε [3
10	II Math 1 β [10 V Math 1 δ [10½	I Math 1 β [10 III Math 1 δ [10½ IV Math 3 γ [9½	I Greek δ [2 III Greek ε [8 V Latin 1 γ [13	I Greek δ [2 III Greek ε [8 V Latin 1 γ [13	I Greek δ [2 III Latin 1 γ [13 V Greek ε [8	I Greek δ [2 III Latin 1 γ [13 V Greek ε [8
11	III Math 1 δ [10½ VI Math 1 β [10	II Math 3 γ [9½ V Math 1 δ [10½ VI Math 1 β [10	II Greek δ [2 IV Greek ε [5 VI Latin 1 γ [13	II Greek δ [2 IV Greek ε [5 VI Latin 1 γ [13	II Greek δ [2 IV Latin 3a ε [3 VI Greek ε [8	II Greek δ [2 IV Latin 1 δ [14 VI Greek ε [8
8				II English	I English	
4	I Math 1 β [10 III Math 3 γ [9½ V Math 1 δ [10½	II Math 1 β [10 III Math 1 δ [10½ V Math 3 γ [9½		I Latin 3a ε [14 III Greek δ [2 V Greek ε [8 IV English	I Latin 1 δ [14 III Greek ε [8 V Greek δ [2 VI English	
5	II Math 1 β [10 IV Math 1 δ [10½ VI Math 3 γ [9½	I Math 3 γ [9½ IV Math 1 δ [10½ VI Math 1 β [10		II Latin 3a ε [14 IV Latin 1 γ [13 VI Greek ε [8 V English	II Latin 1 δ [14 IV Latin 1 γ [13 VI Greek δ [2 III English	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.

ACADEMIC FRESHMAN SECOND TERM SCHEDULE.—1895-96.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8		II, V Bible I French [4 IV German [3	III, VI Bible II French [4 IV German [3	I, IV Bible III French [4 VI German [3	II Latin δ [14 III Greek ε [9½ V Latin	I Latin γ [13 III Latin [7 V Latin
9	II Math 2 δ [10½ IV Math 2 γ [9½	III French [4 VI German [3	I French [4 V German [3	II French [4 V German [3	I Latin γ [13 IV Greek ε [9½ VI Greek	II Latin γ [13 VI Latin δ [14 IV Latin
10	I Math 2 γ [9½ III Math 2 δ [10½	I Math 4 β [10 V Math 2 δ [10½ VI Math 2 γ [9½	I Greek δ [2 III Greek ε [9½ V Latin δ [14	I Latin δ [14 III Greek δ [2 V Greek ε [9½	II Latin γ [13 III Greek δ [2 V Latin δ [14	I Latin δ [14 III Latin γ [13 V Greek ε [9½
11	V Math 2 δ [10½ VI Math 2 γ [9½	II Math 4 β [10 III Math 2 δ [10½ IV Math 2 γ [9½	II Greek δ [2 IV Greek ε [9½ VI Latin δ [14	II Greek δ [2 IV Greek γ [9 VI Latin δ [14	I Greek δ [2 IV Greek γ [9 VI Latin δ [14	II Latin δ [14 IV Latin γ [13 VI Greek ε [9½
3						
4	II Math 2 δ [10½ IV Math 2 γ [9½ V Math 4 β [10	I Math 2 γ [9½ II Math 2 δ [10½ III Math 4 β [10		I Greek ε [9½ III Latin δ [14 V Greek γ [2	I Greek ε [9½ III Latin δ [14 V Greek γ [2	
5	I Math 2 γ [9½ III Math 2 δ [10½ VI Math 4 β [10	IV Math 4 β [10 V Math 2 δ [10½ VI Math 2 γ [9½		II Greek ε [9½ IV Latin δ [14 VI Greek γ [2	II Greek ε [9½ IV Latin δ [14 VI Greek γ [2	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.

ACADEMIC SOPHOMORE FIRST TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	II Greek α [7	I Greek α [7	BIBLE	IVb, VI HISTORY	I German [5	I German [5
9	I Greek α [7	II Greek α [7	I MATH [10½ III Latin [14	I MATH [10½ III Latin [14	I MATH [10½ II, IV, VI Zo & BOT.	II, I V, VI Zo. & BOT. I, IIIa HISTORY II German [5
10	I LATIN α [8 III GREEK β [12 V LATIN β [14	I LATIN α [8 III GREEK β [12 V LATIN β [14	II MATH [10½ II Latin [14	II MATH [10½ II Latin [14	II MATH [10½ II German [5	IIIb, V HISTORY III German [5
11	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	I Latin [14	I Latin [14	I, III, V Zo & BOT III German [5	I, III, V Zo. & BOT. II, IVa HISTORY
8	I GREEK β [12 III LATIN ε [14 V GREEK γ [2	I GREEK β [12 III LATIN ε [14 V GREEK γ [2		I, IIIa HISTORY	II, IVa HIST [5	
4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4		IIIb, V HISTORY II Math [9	IVb, VI HISTORY II Math [9	
5	II French [3 I French [4	II French [3 I French [4		I Math [9	I Math [9	

Required studies in SMALL CAPITALS. Roman Numerals indicate divisions, Arabic numerals after brackets indicate rooms.

Divisions independent in Required Classics and Required Mathematics. History, Zoology and Botany take mathematical divisions.

ACADEMIC SOPHOMORE SECOND TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I Greek γ [2	I Greek γ [2		I German [3 II German [5	I German [3 II German [5
9	II Greek γ [2	II Greek γ [2	I, II CHEM III Latin	I, II CHEM III Latin	III German [3	III German [3
10	I LATIN α [8 III GREEK β [12 V LATIN ε [14	I LATIN α [8 III GREEK β [12 V LATIN ε [14	I Latin	I Latin	I MECHANICS [10 III ENGLISH IV German [3	I MECH [10 II MECH [10½ IV German [3
11	II LATIN α [8 IV GREEK β [12 VI LATIN ε [14	II LATIN α [8 IV GREEK β [12 VI LATIN ε [14	III, IV CHEM II Latin	III, IV CHEM II Latin	II MECH [10 IV ENGLISH	II MECH [10 IV MECH [10½
8	I GREEK β [12 III LATIN ε [14 V, VI GREEK δ [2	I GREEK β [12 III LATIN ε [14 V GREEK δ [2		I, II ENGLISH	I ENGLISH III MECH [10½	
4	II GREEK δ [2 IV LATIN ε [14 III French [4	II GREEK δ [2 IV LATIN ε [14 III French [4		III, IV ENGLISH II Math [9	II ENGLISH IV MECH [10½ II Math 9	
5	II French [3 I French [4	II French [3 I French [4		I Math [9	I Math [9	

Chemistry and English take Mechanics divisions.

ACADEMIC JUNIOR FIRST TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I PHYSICS	Engl. Lit. 5	Engl. Lit. 5	*Italian* 1	*Italian* 1
9		II PHYSICS	*Hist. of Phil.*	*Hist. of Phil.*	I PSYCHOLOGY	I PSYCHOLOGY
10	*Jurisprudence* *Art* 1	*Jurisprudence* *Art* 1	Ancient Hist. *Bible*	Ancient Hist. *Bible*	French Lit.	French Lit.
11	Astronomy 1 *Spanish* 1	Astronomy 1 *Spanish* 1	Theor. Chem. 3 *Juvenal* 9 *Old English*	Theor. Chem. 3 *Juvenal* 9 *Old English*	II PSYCHOLOGY German	II PSYCHOLOGY German
3	*Solid Geometry*	*Solid Geometry*		Biology 8 *Diff. Equations*	Biology 8 *Diff. Equations*	
4	I PHYSICS	I PHYSICS		*Odyssey*	*Odyssey*	
5	II PHYSICS	II PHYSICS		*Geology* 8	*Geology* 8	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC JUNIOR SECOND TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I LOGIC	Engl. Lit. 6 Invert. Morph.	Engl. Lit. 6 Invert. Morph.	*Physics* 4 *Italian* 2 *Histology*, 8.	*Physics* 4 *Italian* 2 *Histology* 8
9		II LOGIC	*Hist. of Phil.*	*Hist. of Phil.*	I POL. ECON.	I POL. ECON.
10	*Intern. Law.* *Art* 2	*Intern. Law.* *Art* 2	Med. History *Bible*	Med. History *Bible*	French Lit.	French Lit.
11	Geology 2 *Spanish* 2	Geology 2 *Spanish* 2	Seneca 10 Prac. Bot. 4	Seneca 10 Prac. Bot. 4	I POL. ECON.	II POL. ECON.
8	*Solid Geometry* *Mid. English* Vert. Anat. 6	*Solid Geometry* *Mid. English* Vert. Anat. 6		Ex. Psy. (2 p. m.) *Diff. Equations* *Plato.* 10	Ex. Psy. (2 p. m.) *Diff. Equations* *Plato* 10	
4	I LOGIC	I LOGIC		II POL. ECON. German	II POL. ECON. German	
5	II LOGIC	II LOGIC		*Geology* 4 *Anal. Mech.* 6 Plautus	*Geology* 4 *Anal. Mech.* 6 Plautus	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR FIRST TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		Gothic Comp. Politics 7 H. P. Curves Osteology	Gothic Comp. Politics 7 H. P. Curves Osteology	Physiology Aristotle 18	Phys. Psych. *Italian* 1 English Lit. 9 Physics 9	Phys. Psych. *Italian* 1 English Lit. 9 Physics 9
9	Lucretius	Lucretius	*Hist. of Phil.*	*Hist. of Phil.*	French Lit. Aristotle 18	French Lit.
10	*Jurisprudence* *Art* 1	*Jurisprudence* *Art* 1	Lab. Chem. 5 German 7 *Bible* 8.	Lab. Chem. 5 German 7 *Bible* 8	Quintilian	Quintilian
11	Theism Pract. Physics Sanskrit *Spanish* 1	Theism Pract. Physics Sanskrit *Spanish* 1	Adv. Ex. Psych 17 History *Juvenal* 9 *Old English* Th. of Functions	Adv. Ex. Psych. 17 History *Juvenal* 9 *Old English* Th. of Functions	Pract. Astron. Poetics Ad. Gen. Psych 19 Roman Law	Pract. Astron. Poetics Ad. Gen. Psych. 19 Roman Law
3	Old French Greek 11 *Solid Geometry* Mamm. Anat. Hebrew	Old French Greek 11 *Solid Geometry* Mamm. Anat. Hebrew		Finance M. H. German 9 Physiology *Diff. Equations* Hebrew	Finance M. H. German 9 *Diff. Equations* Hebrew	
4	Art 8 Astronomy 8 Hist. of Law	Art 8 Astronomy 8 Hist. of Law		Art. 5 Advan. Logic Italian 8 *Odyssey*	Art 5 Advan. Logic Italian 8 *Odyssey*	
5	ETHICS	ETHICS		O. H. German Metaphysics *Geology* 8	O. H. German Metaphysics *Geology* 8	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR SECOND TERM SCHEDULE.—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Embryology H. Pl. Curves	Embryology H. Pl. Curves Latin 16	EV. OF CHR.	Latin 16 Palæontology	*Histology* 8 *Physics* 4 *Italian* 2 Engl. Lit. 10	*Histology* 8 *Physics* 4 *Italian* 2 Engl. Lit. 10
9	Amer. Lit. Phys. Geog.	Amer. Lit. Phys. Geog.	*Hist. of Phil.*	*Hist. of Phil.*	French Lit.	French Lit.
10	*Intern. Law* *Art* 2 Old French	*Intern. Law* *Art* 2 Old French	German 8 *Bible* 4 Palæontology	German 8 *Bible* 4	Palæontology Greek 14	Palæontology Greek 14
11	Theism Pract. Physics *Spanish* 2	Theism Pract. Physics. *Spanish* 2	Adv. Ex. Psy. 18 History Th. of Functions	Adv. Ex. Psy. 18 History Th. of Functions	Roman Law Adv. Gen. Psy. 20 Pract. Ast. Prose Fiction	Roman Law Adv. Gen. Psy. 20 Pract. Astron. Prose Fiction
8	Greek 12 *Solid Geometry* *Mid. English* Histology 10	Greek 12 *Solid Geometry* *Mid. English* Histology 10		Hist. Pol. Econ. M. H. German 10 *Plato* *Diff. Equations*	Hist. Pol. Ec. Mid. H. Germ. 10 *Plato* *Diff. Equations*	
4	Cicero 14 Art 6 Eng. Com. Law	Cicero 14 Art 6 Eng. Com. Law		Art 4 Advan. Logic Science & Rel.	Art 4 Advan. Logic Science & Rel.	
5	Hebrew Sanskrit Outlines Phil.	Hebrew Sanskrit Outlines Phil.		Old Norse Italian 4 Hebrew *Anal. Mech.* 6 *Geology* 4	Old Norse Italian 4 Hebrew *Anal. Mech.* 6 *Geology* 4	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

JOHN C. GREEN SCHOOL OF SCIENCE.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty room in the College Offices, the evening before the examination begins, or on their arrival the following morning. The first examination for admission will begin in Princeton, on Thursday, June 11th, 1896, at 10 A. M., and will continue through the afternoon of Friday. The second will begin on Tuesday, September 15th, at 10 A. M., and continue through the afternoon of Wednesday. Applicants who have conditions or other deficiencies from the June examination are expected to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations are held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha and Denver; and at preparatory schools and other cities when necessary. The precise places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are very inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission must bring satisfactory testimonials of good moral character and attainments, preferably from their last instructors, and if the candidate has been a member of another college, university, or similar institution, he must produce a certificate from its President or Faculty that he is free from censure in the same.

Candidates for admission to the Freshman class must be at least sixteen years of age.

No candidate is admitted without an examination and a vote of the Faculty.

Immediately after the opening of the College the entering students meet according to announcement for the registration of their names and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other college so long as we are members of the College of New Jersey; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

In the subjoined list of subjects candidates for the courses leading to the degree of Bachelor of Science are required to pass examinations in I, II, III, IV, VI, and in either VII or VIII; candidates for the course in civil engineering are required to pass examinations in I, II, III, IV, V, and in either VII or VIII.

Attention is especially called to the increased requirements and to the announcements that in June, 1896, and thereafter, all applicants will be examined in both VII French and VIII German instead of in only one of the two as at present; and that in June, 1897, and thereafter, applicants for admission to the course in civil engineering will be examined on an additional portion of the algebra, the exact details of which will be announced in the next catalogue.

I. English: English Grammar—Whitney or equivalent; United States History—Johnston, Scott, or equivalent; Essay. For 1896, the theme of the essay will be based on selections from Milton's L'Allegro and Penseroso, Macaulay's Essay on Milton, Longfellow's Evangeline, and Webster's First Bunker Hill Oration. For 1897 the books will be: Hawthorne's Twice Told Tales, George

Eliot's Silas Marner, Scott's Marmion and Macaulay's Life of Samuel Johnson.

II. ARITHMETIC: Arithmetic entire, including the metric system, a practical knowledge of which is indispensable.

III. ALGEBRA: Algebra, through the binomial theorem with positive integral exponents, as developed in the first thirty-seven chapters of Wells's University Algebra or equivalent; including evolution, radicals, theory of exponents, quadratic equations involving one and two unknown quantities, ratio and proportion, variation, arithmetical and geometrical progressions, and the binomial theorem with positive integral exponents.

IV. GEOMETRY: Plane and Solid Geometry as presented in the first seven books of Wentworth's Geometry or equivalent. This includes the cylinder and cone.

V. TRIGONOMETRY: Plane Trigonometry, including the analytical theory of the trigonometrical functions and the usual formulae, the use of trigonometrical tables, and the solution of plane triangles, so much for example as is contained in Part 1 of Wells's Essentials of Trigonometry.

VI. LATIN: Grammar, with special attention to parsing, and the retranslation from English into Latin of simple sentences from the first book of Cæsar; Translation, Cæsar (five books of the Gallic War), Cicero (the four orations against Catiline), or equivalents from other Latin authors.

VII. FRENCH: The examination will be upon the general principles of grammar [*Otto:* pp. 28–201; or *Whitney:* Brief French Grammar, pp. 22–111; or *Edgren:* pp. VIII–LXIII, and 27–104], and the ability to translate easy prose; such as the first fifty pages of Whitney's Introductory French Reader or Super's French Reader, or of *G. Sand's* La Mare au Diable, (Macmillan's school edition), or *Erckmann-Chatrian's* Le Conscrit.

VIII. GERMAN: The examination will be upon the general principles of grammar [*Whitney:* pp. 23–153 and 278–284; or *Otto:* pp. 18–253; or *Huss:* pp. 9–101 of the Theoretical Part, the sections with heavy-faced references only], and the ability to translate easy prose; such as *Grimm's* Märchen (Otis's edition, pp. 1–49), or *Boisen's* German Prose (pp. 3–51), or *Joynes's* German Reader, Part II and pp. 85–110 of Part IV.

It is recommended that all candidates should receive instruction in free-hand drawing before their entrance.

Preliminary Examinations.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate unless he pass in at least three of the subjects enumerated above, not including both French and German, nor will the preliminary certificate be granted to any candidate more than once.

Admission to Advanced Standing.

Candidates for admission to an advanced class will be examined in the studies previously pursued by the class they propose to enter and may also be required to pass the regular examinations for admission to the Freshman class. While a certificate of satisfactory work done in any of these studies in another institution will not necessarily excuse from examination, it may in some degree modify the examination, and should therefore always be presented. Examinations for advanced standing are held only in Princeton.

Admission to Special Courses.

Admission to special courses and the regulation of work therein are determined in the same way as for special courses in the Academic department (*vide p.* 28).

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

The regulations concerning examinations, conditions and the removal of conditions are the same as those for the students of the Academic department and are given on pp. 30–32; excepting that the regulations concerning conditions at the end of the Senior year and concerning thesis requirements are given below under the heading "Graduation."

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student during the term. In computing ranks, each study, elective or required, is estimated relatively to the others according to the number of hours which it occupies in the weekly schedule of lectures and recitations. The conduct of the student and his attendance also affect his standing according to the published rules of the Faculty. The maximum mark is one hundred; the minimum mark for passing in any subject is sixty. A report of the standing of each student is made to his parent or guardian by the Registrar of the College at the close of the first term and at the end of the year. The last report gives the student's standing for the year.

The final rank of a student is calculated from all the marks received by the student during his College course.

GRADUATION.

Each candidate for a degree is required to prepare and submit for the approval of an instructor, appointed by Faculty for the purpose, a graduation thesis. This shall be a design or review of some structure or process or an examination of some work or sub-

ject selected from some study specially connected with the scientific department. The subject selected for the graduation thesis must be reported to the Faculty, by the candidates for the degree of C. E. on or before the first Monday of October (October 7, 1895), and by the candidates for the degree of B. S. on or before the second Monday of January (January 13, 1896), of their Senior year. The graduation thesis must be finished by the second Saturday before Commencement (May 30, 1896), and the student may be required to read and defend his thesis in public during Commencement week.

Students who have fulfilled the requirements of their undergraduate courses, passing satisfactory examinations in all their studies and presenting acceptable graduation theses, are ordinarily recommended by the Faculty for the degree attached to the course they have pursued, and, if the recommendation is approved by the Trustees, the degree is conferred at Commencement and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next College year.

UNDERGRADUATE COURSES.

Undergraduate courses are provided for the degrees of Bachelor of Science and Civil Engineer.

The undergraduate courses offer, according to the choice of the student, efficient education in the natural sciences in general, or a thorough training in the study of civil engineering, and in various other branches of science, pure and applied. At the same time a liberal education in certain academic studies is secured to all candidates for a degree.

Instruction is given by lectures and recitations—by practice in the laboratories, drawing-rooms, museums and field—and excursions are made to different points of interest.

All candidates for the degree of Bachelor of Science pursue the same studies until the end of Sophomore year. At that time each student makes his election between the course in General Science and the course in Chemistry and he cannot afterward change his course without the permission of the Faculty.

Candidates for the degree of Civil Engineer pursue some studies in common with candidates for the degree of Bachelor of Science, but the divergence of the two courses commences at the very beginning.

Optional Courses.—The optional courses which are offered to the students of the Academic department, as given in the Statements of Courses, are also open to those students of the School of Science who may be fitted to pursue them with profit.

The following symbols are used to indicate the different courses:

a, all courses leading to the degree of Bachelor of Science.

g, the course in General Science.

c, the course in Chemistry.

e, the course in Civil Engineering.

DEPARTMENT OF SCIENCE.

COURSE IN GENERAL SCIENCE (*a*, *g*).

This is intended to afford instruction in science without necessarily specializing in any one department. Election to it must be made at the end of Sophomore year; during the Junior and Senior years the studies are largely elective. The choice of these elective studies is governed by the same rules as are in force in the Academic department as given on p. 86 and in the Regulations concerning Registration given on a later page under "General College Orders."

These electives include many of those given in the Academic department and offer a wide variety of choice. A proper selection of electives in mathematics, mechanics and graphics furnishes a suitable preparation for the graduate course in Electrical Engineering. Students who contemplate entering the medical profession may combine the electives in Biology and Chemistry so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges.

A synopsis of the required and elective studies of the course will be found on a later page.

COURSE IN CHEMISTRY (*a*, *c*).

This course is designed to afford instruction in analytical and technical chemistry, and students electing it enter upon the special studies of the course at the beginning of Junior year.

The synopsis of the course is given on a later page.

DEPARTMENT OF CIVIL ENGINEERING (*e*).

The course in Civil Engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C. E.) The regular course of study occupies four years; but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts who have pursued elective courses in mathematics and Bachelors of Science can ordinarily be prepared for the degree of C. E. by a two-years course in the technical studies

required for that degree. But by a judicious selection of elective studies, a candidate for the degree of B. S. in the course in General Science can materially shorten the time which he will need for such preparation after receiving the bachelor's degree.

The regular course of study diverges from that in General Science at the beginning, but not so greatly as to make it difficult to change, if desirable, from one course to the other before the opening of the Sophomore year.

Besides the studies taken in common with the candidates for the degree of Bachelor of Science the technical work covers the following ground. A thorough preliminary training in mathematics is necessary for most of the technical studies.

RATIONAL AND APPLIED MECHANICS AND THEORY OF MACHINES is made to cover a wide field of study, beginning with the general discussion of motions and the action of forces, and ending with the deduction of practical formulas relating to the elasticity and strength of materials, the stability of different structures, the power, efficiency and strength of hydraulic, steam and air motors, and to the various problems which arise in the practice of hydraulic engineers. In dealing with these subjects, rigidly mathematical treatment is generally used, and higher analysis is freely employed wherever it is expedient; yet proper weight is given to methods of graphic analysis, and the student's attention is especially directed to those problems in which such methods are employed with marked advantage.

EXPERIMENTAL MECHANICS aims to familiarize the student with the physical properties of building materials; to teach him by actual experiment how to conduct tests and to deduce therefrom coefficients of strength, elasticity, etc.; how to determine coefficients of hydraulic flow and resistance; and how to gauge, by the aid of indicators and dynamometers, the power of steam and other motors. Under this head come also problems in the erection of structures.

THE PLANNING AND CONSTRUCTION OF ENGINEERING WORKS is treated in lectures. Great stress is laid on the application of correct principles and formulas; on the careful inspection, manipulation and preservation of materials, and on the economic features of various designs and modes of executing them.

An important feature of this part of the course consists of excursions for the examination of rolling mills, bridge works, machine

shops, water works, etc. In these visits the class is accompanied by either the Professor or Assistant Professor of Civil Engineering, and every member is required to make full notes of his observations and of the instruction received during the trip.

GEODESY, beginning with the measurements of lines and angles, extends through different kinds of surveys in the order of their complexity and ends with problems in higher geodesy. The structure, adjustment and use of each instrument are made subjects of special attention, and no student is allowed to participate in any extended field operation until he has acquired a certain dexterity in handling the instruments used therein. A marked feature of the course is the stress laid on the collection and verification of field notes by each student, and on their proper use in the preparation of different kinds of plans, maps and charts of surveys. No error is allowed, in field work or in platting, which is not within the limits observed in current practice.

TOPOGRAPHICAL DRAWING includes the execution, in pen work and colors, of finished plans and maps of various kinds of surveys. Except in the necessary preliminary drill, the drawings invariably represent actual surveys made by the different classes. A rigid adherence to the field notes of each survey and a high degree of finish are required in the execution of these drawings.

The synopsis of the course of study and the description of the laboratory, instruments and apparatus connected with the department are given on later pages.

STATEMENTS OF COURSES.

A number of studies are pursued either together with the Academic classes, or essentially as given in the statements of courses in the Academic department, and under the same instructors.

In the following statements of courses the numbers in brackets indicate the number of exercises a week.

German.

PROFESSOR HUSS AND MR. PRIEST.

1. The elements of grammar. Introductory reader. Required study for those who offer French for entrance and excludes from

French 1. Freshman *a;* first term [4]; *e;* first term [3]. Professor Huss or Mr. Priest. *Huss:* Conversation in German on a grammatical basis. Monthly written recitations.

2. Review of the elements of grammar. Advanced grammar. Committing German model sentences illustrating the principles of grammar. Conversational exercises based thereon. Reading literary prose such as Storm's Immensee. Freshman, *a, e;* second term [2]. Professor Huss or Mr. Priest. Monthly written recitations.

3. Review of advanced grammar. Reading literary prose such as von Hillern's Höher als die Kirche or Heyse's L'Arrabbiata. Committing German model sentences. Conversational exercises. Sophomore, *a;* first term [3]. Professor Huss. Sophomore, *e;* first term [2]. Mr. Priest. Monthly written recitations.

4. Introductory scientific prose. The construction of the German period. Goethe's Hermann und Dorothea. Conversational exercises. Sophomore *a;* second term [3]. Professor Huss. Sophomore, *e;* second term [2]. Mr. Priest.

5. Schiller's dramas with lectures thereon. Junior, *c, g* elective; first term [2]. Professor Huss.

6. Lessing's critical writings. Classical lyrics and ballads. Junior *c, g* elective; second term [2]. Professor Huss.

7, 8. Goethe's Faust. Lectures on the medieval epics and on the life and works of Klopstock, Lessing, Wieland, Herder, Schiller, and Goethe. Scientific monographs. Composition. Senior, *c, g* elective; both terms [2]. Professor Huss.

French.

PROFESSOR LEWIS AND MR. WATSON.

1. Elementary French. Required study for those who offer German for entrance and excludes from German 1. Freshman *a;* first term [4]; *e;* first term [3]. Professor Lewis or Mr. Watson. *Whitney:* Brief French Grammar. *Verne:* Michel Strogoff. *Super:* French Reader. Exercises based on *Michel Strogoff.*

2. French. Freshman, *a, e;* second term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Super:* French Reader. *Müller:* Les grandes Découvertes Modernes. *Herdler:* Scientific French Reader.

3. Advanced French. Sophomore, *a*, *e*; first term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Garrigues et De Monvel:* Simples Lectures sur les Sciences. *Melzi:* Practical Handbook of French Correspondence. *Van Daell:* Introduction to French Authors.

4. Advanced French. Sophomore, *a*, *e*; second term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Van Daell:* Introduction to French Authors. *Freeborn:* Morceaux Choisis d'Alphonse Daudet. *Hugo:* La Chute.

5. French Literature. Lectures on the principal authors of the 17th century. Junior, *g* elective; first term [2]. Professor Lewis. This course, as well as all the other French courses of the Junior and Senior years, are open only to those students who have satisfactorily completed the work preceding each separate course. All lectures in French Literature will be accompanied with considerable collateral reading beside the regular class-room work. *Warren:* French Prose of the 17th Century. *Corneille:* Le Cid. *Molière:* Le Bourgeois Gentilhomme. *Molière:* Les Précieuses Ridicules. *Racine:* Athalie.

6. French Literature. Lectures on the principal authors of the 18th century. Junior, *g* elective; second term [2]. Professor Lewis. *Cohn and Woodward:* French Prose of the 18th century. *Voltaire:* Zaïre. *Montesquieu:* Lettres persanes. *Sedaine:* Philosophe sans le savoir. *Beaumarchais:* Le Barbier de Séville. *Beaumarchais:* Le Mariage de Figaro. *Bernardin de Saint-Pierre:* Paul et Virginie.

7. French Literature. Lectures on the principal authors of the 19th century. Senior, *g* elective; first term [2]. Professor Lewis. *Fontaine:* Les Prosateurs du 19e Siècle. *Warren:* Selections from Victor Hugo. *Hugo:* Hernani. *De Vigny:* Le Cachet Rouge. *Dumas:* L'Evasion du Duc de Beaufort. *Souvestre:* Le Mari de Madame de Solange. *Musset:* Pierre et Camille. *Musset:* On ne badine pas avec l'amour. *Harper and Livingood:* Contes de Balzac. *Balzac:* Le Curé de Tours. *Augier:* Le Gendre de M. Poirier. *Pailleron:* Le monde où l'on s'ennuie. *Price:* Choix d'Extraits de Daudet. *Daudet:* Lettres de mon Moulin.

8. French Literature. Lectures on French Poetry. Senior, *g* elective; second term [2]. Professor Lewis. *Bowen:* French Lyrics. *Masson:* La Lyre française. *Warren:* Selections from

Victor Hugo. *Hugo:* Légende des Siècles. *Lamartine:* Méditations. *Gautier:* Emaux et camées.

9, 10. Old French Readings. Senior, *g* elective, open also to Academic Seniors; both terms [2]. Professor Lewis. This course is open to all Seniors who have satisfactorily completed the previous three years' work in French. For the text-books used, see Nos. 11 and 12 of Academic French.

Mathematics.

PROFESSOR ROCKWOOD, MR. BROOKS, AND MR. REID.

1. Algebra. Freshman, *a*, *e;* first term [2]. Mr. Reid. *Wells:* College Algebra.

2. Theory of Equations. Freshman, *a*, *e;* second term [2]. Mr. Reid. *Wells:* College Algebra.

3. Spherical Geometry. Freshman, *a*, *e;* half of first term [1]. Prof. Rockwood. *Wentworth:* Geometry.

5, 6. Trigonometry; plane with applications to mensuration, and spherical. Freshman, *a;* first and second terms [2]. Mr. Reid. *Wells:* Trigonometry.

7. Trigonometry; plane reviewed with applications to mensuration, spherical. Freshman, *e;* first term [2½]. Mr. Brooks. *Wells:* Trigonometry.

8. Analytical Geometry commenced. Freshman, *a;* second term [1]. Mr. Reid. *C. Smith:* Conic Sections.

9. Analytical Geometry of two dimensions. Sophomore, *a*, *e;* first term [4]. Professor Rockwood or Mr. Brooks. *C. Smith:* Conic Sections.

10. Analytical Geometry of two dimensions. Freshman, *e;* second term [3]. Mr. Brooks. *C. Smith:* Conic Sections.

12. Differential and Integral Calculus. Sophomore, *a;* second term [4]. Mr. Brooks. *Osborne:* Calculus.

14. Differential and Integral Calculus. Sophomore, *e;* second term [5]. Professor Rockwood. *Osborne:* Calculus.

Physics.

PROFESSORS BRACKETT AND MAGIE, MR. WATERMAN, AND DR. LOOMIS.

1, 2. General Physics; mechanics, heat, magnetism, electricity, sound, light. Junior, *a*, *e;* both terms [4]. Dr. Loomis. *Anthony and Brackett:* Elementary Text-Book of Physics.

The elective courses in Physics for the Junior and Senior years are the same as those in the Academic department.

General Chemistry.

PROFESSOR MCCAY.

1, 2. Course in General Chemistry. Experimental lectures and recitations. Freshman, *a*, *e*; both terms [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

Applied Chemistry and Mineralogy.

PROFESSOR CORNWALL, MR. NEHER, AND MR. PHILLIPS.

The term "exercises a week" in the statements below means *single hours* for lectures and recitations, but *exercises* of two or two and one-half hours each for laboratory work. Usually where a course embraces both class-room and laboratory work one-fourth of the exercises are in the class-room. Special students are not admitted to work in Analytical Chemistry and Mineralogy without previous examination as to their fitness for the work; and all such students must take the Mathematics of the Freshman year before beginning Mineralogy. Courses 14, 15 and 16 are not open to special students.

1, 2. Qualitative Analysis; including the commoner metals and acids, both in simple and mixed substances. Sophomore, *a*; one term [4]. Mr. Neher. *Neher:* Notes on Qualitative Analysis.

3, 4. Quantitative Analysis; introductory course, including simple salts, limestone, coal, felspar, etc., and sugars, milk and similar food analysis. Junior, *c*; first term [2], second term [5]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes.

5. Qualitative Analysis; advanced course. Junior, *c*; first term [2]. Professor Cornwall and Mr. Neher. *Fresenius:* Qualitative Chemical Analysis.

7. Organic Chemistry: lectures and recitations on typical organic compounds, with applications to study of water, foods, poisons, disinfectants, etc. Junior, *c*, *g* elective; first term [2]. Professor Cornwall.

8. Quantitative Analysis; shorter introductory course, including simple salts, sugar, foods, etc.; must be preceded by the lecture course 7. Senior, *g*, elective; second term [4]. Professor Cornwall and Mr. Neher. *Appleton:* Quantitative Analysis.

9, 10. Quantitative Analysis; advanced: including complex substances, Iron, Steel and Technical Analysis in general. Senior, *c;* first term [6], second term [6]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes. *Chemical Periodicals.*

11. Volumetric Analysis. Senior, *c;* first term [1]. Mr. Neher. *Mohr:* Titrirmethode. *Sutton:* Volumetric Analysis.

13, 14. Technical Chemistry; lectures and recitations on applications of Chemistry to Arts and Manufactures; must be preceded by the lecture course 7. Senior, *c, g* elective; both terms [1]. Professor Cornwall.

16. Assaying; furnace assay of gold, silver and lead ores; lectures and laboratory work. Junior and Senior, *c;* second term. [2]. Professor Cornwall and Mr. Phillips. *Ricketts:* Notes on Assaying.

17 or 18. Determinative Mineralogy (Blowpipe Analysis), preceded by a short course of lectures, including elements of crystallography. Sophomore, *a;* one term [4]; *e;* first term [3]. Professor Cornwall and Mr. Phillips. *Cornwall:* Manual of Blowpipe Analysis and Determinative Mineralogy.

19, 20. Mineralogy; advanced: lectures, recitations and practice in theoretical, determinative and optical mineralogy. Senior, *c, g* elective; both terms [1]. Professor Cornwall. *Moses and Parsons:* Mineralogy.

Biology.

PROFESSORS MACLOSKIE, LIBBEY, RANKIN AND MCCLURE.

2. Human Anatomy and Physiology. Lectures, illustrated by skeletons, manikin and diagrams. Freshman, *a;* second term [1½]. Professor Macloskie. *Martin:* Human Body.

3. Elementary Botany. Dissection, description and classification of flowering plants. Sophomore, *a;* first term [2]. Professor Rankin. *Macloskie:* Elementary Botany. *Gray:* Manual of Botany.

4. Elementary Zoology. Lectures and demonstrations. Sophomore, *a;* second term [3]. Professors Macloskie and Rankin. *Packard:* Zoology.

The elective courses in Biology for the Junior and Senior years are the same as for the Academic department. (See earlier page.)

Graphics.

PROFESSOR WILLSON AND MR. TORREY.

The following courses involve recitation and examination upon the theory, as well as practical work in the draughting-room.

1. Elementary Technical Draughting. Line and brush shading; conventional representations; lettering; higher plane curves; motion curves; oblique and orthographic projection; working drawings. Freshman, *a;* first term [8]; *e;* first term [4]. Professor Willson and Mr. Torrey. *Willson:* Theoretical and Practical Graphics.

2. Orthographic projection, continued; working drawings; tracings. Freshman, *e;* first half of second term [3]. Professor Willson and Mr. Torrey.

4. Technical Free-Hand Drawing. Freshman, *a;* first half of second term [3]. Mr. Torrey.

6. Practical graphical work; either bridges, roof trusses, machinery, or sheet metal pattern making. Sophomore, *e;* second term [1]. Professor Willson.

7. Descriptive Geometry; pure, and also as applied to developable, double-curved, and warped surfaces, and including spherical projections and trihedrals. Junior, *e, g* elective; first term [3]. Professor Willson. *Willson:* Theoretical and Practical Graphics.

8. Shades, Shadows, and Perspective; mathematical theory, with applications mainly to architectural subjects. Junior, *e, g* elective; second term [2]. Professor Willson and Mr. Torrey. *Church:* Shades, Shadows, and Perspective. *Wright:* Architectural Perspective.

9a. Stereotomy. Descriptive geometry, applied to the solution of problems in stone-cutting, which are likely to arise in railroad

or architectural construction. Senior, *e*, *g* elective; part of first term [2]. Professor Willson. *Warren:* Stone-Cutting.

9b. Valve Motion. Senior *e*, *g* elective; part of first term [2]. Professor Willson. Lectures.

10. Mechanism (Theory) and Machine Drawing. Senior *e*, *g* elective; second term [2]. Professor Willson and Mr. Torrey. *Stahl and Wood:* Elementary Mechanism.

Surveying.

PROFESSOR SMITH.

1. Surveying. Theory and practice with special reference to business life. Junior, *g* elective; first term [2]. Professor Smith.

Mechanics.

PROFESSORS MCMILLAN AND SMITH AND MR. FRASER.

1, 2. Rational Mechanics; analytic and graphic. Junior, *e*, *g* elective; both terms [3]. Professor Smith and Mr. Fraser.

3. Elasticity and Strength of Materials. Senior, *e*, *g* elective; second year, *l*; first term [3]. Professor Smith.

5. Roofs and Bridges. Senior, *e*; first term [7]. Professor McMillan and Mr. Fraser.

6. Stability of Structures. Senior, *e*; second term [3]. Professor Smith.

8. Motors. Senior *e*, *g* elective; second term [4]. Professor McMillan and Mr. Fraser. *Rankine:* Steam Engine.

Constructions.

PROFESSORS MCMILLAN AND SMITH.

1. Structural Materials and Tests: Foundations. Senior, *e*; first term [2]. Professor Smith. Lectures and laboratory work.

2. Construction of Water Works. Senior, *e*; second term [2]. Professor Smith. Lectures.

4. Sewerage and Drainage. Senior, *e*; second term [2]. Professor McMillan. Lectures.

6. Roads. Senior, *e*; second term [2]. Professor McMillan. Lectures.

Geodesy.

PROFESSOR HARRIS AND MR. FRASER.

2. Line measurement and farm surveying; recitations and field work. Freshman, *e;* second term [1½]. Mr. Fraser. *Staley-Gillespie:* Land Surveying.

3. Platting of field notes; topographical drawing in pen work and colors. Sophomore, *e;* first term [5]. Professor Harris and Mr. Fraser. *McMillan-Smith:* Topographical Drawing.

4. Transit work and levelling; recitations, field work and mapping. Sophomore, *e;* second term [6]. Professor Harris. *Staley-Gillespie:* Land Surveying.

5. Town, mine and hydrographic surveying; recitations, field work and mapping. Junior, *e;* first term [4]. Professor Harris. Lectures.

6. Railroad surveying; recitations, field work and office work. Junior, *e;* second term [5]. Professor Harris. *Searles:* Field Engineering.

DEPARTMENT OF ELECTRICAL ENGINEERING.

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The special course of study in electricity occupies two years of graduate work.

REQUIREMENTS FOR ADMISSION.

I. Graduates of the College, either in the Academic Department or in the John C. Green School of Science, who have taken satisfactory courses, will be admitted to the course in Electrical Engineering without examination.

II. Applicants who are graduates of other colleges must satisfy the Professors in charge that they have sufficient knowledge of mathematics, including differential and integral calculus, of physics and chemistry, and of French and German, to enable them to pursue the course with profit.

III. Applicants who are not graduates of any college may be admitted to the course if they show their fitness for it on examination in mathematics to the completion of the calculus, analytic mechanics, mechanical drawing and descriptive geometry, general and analytical chemistry, geology, astronomy, English language and literature, French and German.

IV. Students, not candidates for a degree, may be received by special arrangements with the Professors in charge.

Course of Study.

First Year:—The mathematical theory of Electricity. *Duhem:* Leçons sur l'Électricité et le Magnétisme: *Maxwell* and other authors.

Elementary Electrical Measurements, with reference to Stewart and Gee, Kohlrausch, Slingo and Brooker, Gray, etc. Two days in the week are left free for this work.

Strength of Materials and Mechanism, each, two hours a week, and Theory of Machines, three hours a week for half the year, are taken with the Senior Class in the Civil Engineering Department.

Second Year:—The Theory of Electrical Measurements. *Fleming:* Alternate Current Transformer. *Kittler.* Four hours a week for half the year.

Theory of Dynamo Construction. *Thompson:* Dynamo Electrical Machinery, with collateral lectures.

Technical Applications of Electricity in Telegraphy, Electrometallurgy and Electro-chemistry, Electric lighting, Transmission of power. Four lectures a week throughout the year.

Advanced Electrical Measurements and Electrical Testing.

In addition to these courses a meeting is held once a week, at which reports on the current electrical literature are made by the students.

Degree.

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application, he must present a thesis on some subject connected with electrical science.

It is recommended that all candidates should receive instruction in free-hand drawing before their entrance.

Preliminary Examinations.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate unless he pass in at least three of the subjects enumerated above, not including both French and German, nor will the preliminary certificate be granted to any candidate more than once.

Admission to Advanced Standing.

Candidates for admission to an advanced class will be examined in the studies previously pursued by the class they propose to enter and may also be required to pass the regular examinations for admission to the Freshman class. While a certificate of satisfactory work done in any of these studies in another institution will not necessarily excuse from examination, it may in some degree modify the examination, and should therefore always be presented. Examinations for advanced standing are held only in Princeton.

Admission to Special Courses.

Admission to special courses and the regulation of work therein are determined in the same way as for special courses in the Academic department (*vide p.* 28).

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

The regulations concerning examinations, conditions and the removal of conditions are the same as those for the students of the Academic department and are given on pp. 30–32; excepting that the regulations concerning conditions at the end of the Senior year and concerning thesis requirements are given below under the heading "Graduation."

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student during the term. In computing ranks, each study, elective or required, is estimated relatively to the others according to the number of hours which it occupies in the weekly schedule of lectures and recitations. The conduct of the student and his attendance also affect his standing according to the published rules of the Faculty. The maximum mark is one hundred; the minimum mark for passing in any subject is sixty. A report of the standing of each student is made to his parent or guardian by the Registrar of the College at the close of the first term and at the end of the year. The last report gives the student's standing for the year.

The final rank of a student is calculated from all the marks received by the student during his College course.

GRADUATION.

Each candidate for a degree is required to prepare and submit for the approval of an instructor, appointed by Faculty for the purpose, a graduation thesis. This shall be a design or review of some structure or process or an examination of some work or sub-

ject selected from some study specially connected with the scientific department. The subject selected for the graduation thesis must be reported to the Faculty, by the candidates for the degree of C. E. on or before the first Monday of October (October 7, 1895), and by the candidates for the degree of B. S. on or before the second Monday of January (January 13, 1896), of their Senior year. The graduation thesis must be finished by the second Saturday before Commencement (May 30, 1896), and the student may be required to read and defend his thesis in public during Commencement week.

Students who have fulfilled the requirements of their undergraduate courses, passing satisfactory examinations in all their studies and presenting acceptable graduation theses, are ordinarily recommended by the Faculty for the degree attached to the course they have pursued, and, if the recommendation is approved by the Trustees, the degree is conferred at Commencement and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next College year.

UNDERGRADUATE COURSES.

Undergraduate courses are provided for the degrees of Bachelor of Science and Civil Engineer.

The undergraduate courses offer, according to the choice of the student, efficient education in the natural sciences in general, or a thorough training in the study of civil engineering, and in various other branches of science, pure and applied. At the same time a liberal education in certain academic studies is secured to all candidates for a degree.

Instruction is given by lectures and recitations—by practice in the laboratories, drawing-rooms, museums and field—and excursions are made to different points of interest.

All candidates for the degree of Bachelor of Science pursue the same studies until the end of Sophomore year. At that time each student makes his election between the course in General Science and the course in Chemistry and he cannot afterward change his course without the permission of the Faculty.

Candidates for the degree of Civil Engineer pursue some studies in common with candidates for the degree of Bachelor of Science, but the divergence of the two courses commences at the very beginning.

Optional Courses.—The optional courses which are offered to the students of the Academic department, as given in the Statements of Courses, are also open to those students of the School of Science who may be fitted to pursue them with profit.

The following symbols are used to indicate the different courses:

a, all courses leading to the degree of Bachelor of Science.

g, the course in General Science.

c, the course in Chemistry.

e, the course in Civil Engineering.

DEPARTMENT OF SCIENCE.

COURSE IN GENERAL SCIENCE (*a*, *g*).

This is intended to afford instruction in science without necessarily specializing in any one department. Election to it must be made at the end of Sophomore year; during the Junior and Senior years the studies are largely elective. The choice of these elective studies is governed by the same rules as are in force in the Academic department as given on p. 36 and in the Regulations concerning Registration given on a later page under "General College Orders."

These electives include many of those given in the Academic department and offer a wide variety of choice. A proper selection of electives in mathematics, mechanics and graphics furnishes a suitable preparation for the graduate course in Electrical Engineering. Students who contemplate entering the medical profession may combine the electives in Biology and Chemistry so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges.

A synopsis of the required and elective studies of the course will be found on a later page.

COURSE IN CHEMISTRY (*a*, *c*).

This course is designed to afford instruction in analytical and technical chemistry, and students electing it enter upon the special studies of the course at the beginning of Junior year.

The synopsis of the course is given on a later page.

DEPARTMENT OF CIVIL ENGINEERING (*e*).

The course in Civil Engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C. E.) The regular course of study occupies four years; but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts who have pursued elective courses in mathematics and Bachelors of Science can ordinarily be prepared for the degree of C. E. by a two-years course in the technical studies

required for that degree. But by a judicious selection of elective studies, a candidate for the degree of B. S. in the course in General Science can materially shorten the time which he will need for such preparation after receiving the bachelor's degree.

The regular course of study diverges from that in General Science at the beginning, but not so greatly as to make it difficult to change, if desirable, from one course to the other before the opening of the Sophomore year.

Besides the studies taken in common with the candidates for the degree of Bachelor of Science the technical work covers the following ground. A thorough preliminary training in mathematics is necessary for most of the technical studies.

RATIONAL AND APPLIED MECHANICS AND THEORY OF MACHINES is made to cover a wide field of study, beginning with the general discussion of motions and the action of forces, and ending with the deduction of practical formulas relating to the elasticity and strength of materials, the stability of different structures, the power, efficiency and strength of hydraulic, steam and air motors, and to the various problems which arise in the practice of hydraulic engineers. In dealing with these subjects, rigidly mathematical treatment is generally used, and higher analysis is freely employed wherever it is expedient; yet proper weight is given to methods of graphic analysis, and the student's attention is especially directed to those problems in which such methods are employed with marked advantage.

EXPERIMENTAL MECHANICS aims to familiarize the student with the physical properties of building materials; to teach him by actual experiment how to conduct tests and to deduce therefrom coefficients of strength, elasticity, etc.; how to determine coefficients of hydraulic flow and resistance; and how to gauge, by the aid of indicators and dynamometers, the power of steam and other motors. Under this head come also problems in the erection of structures.

THE PLANNING AND CONSTRUCTION OF ENGINEERING WORKS is treated in lectures. Great stress is laid on the application of correct principles and formulas; on the careful inspection, manipulation and preservation of materials, and on the economic features of various designs and modes of executing them.

An important feature of this part of the course consists of excursions for the examination of rolling mills, bridge works, machine

shops, water works, etc. In these visits the class is accompanied by either the Professor or Assistant Professor of Civil Engineering, and every member is required to make full notes of his observations and of the instruction received during the trip.

GEODESY, beginning with the measurements of lines and angles, extends through different kinds of surveys in the order of their complexity and ends with problems in higher geodesy. The structure, adjustment and use of each instrument are made subjects of special attention, and no student is allowed to participate in any extended field operation until he has acquired a certain dexterity in handling the instruments used therein. A marked feature of the course is the stress laid on the collection and verification of field notes by each student, and on their proper use in the preparation of different kinds of plans, maps and charts of surveys. No error is allowed, in field work or in platting, which is not within the limits observed in current practice.

TOPOGRAPHICAL DRAWING includes the execution, in pen work and colors, of finished plans and maps of various kinds of surveys. Except in the necessary preliminary drill, the drawings invariably represent actual surveys made by the different classes. A rigid adherence to the field notes of each survey and a high degree of finish are required in the execution of these drawings.

The synopsis of the course of study and the description of the laboratory, instruments and apparatus connected with the department are given on later pages.

STATEMENTS OF COURSES.

A number of studies are pursued either together with the Academic classes, or essentially as given in the statements of courses in the Academic department, and under the same instructors.

In the following statements of courses the numbers in brackets indicate the number of exercises a week.

German.

PROFESSOR HUSS AND MR. PRIEST.

1. The elements of grammar. Introductory reader. Required study for those who offer French for entrance and excludes from

French 1. Freshman *a;* first term [4]; *e;* first term [3]. Professor Huss or Mr. Priest. *Huss:* Conversation in German on a grammatical basis. Monthly written recitations.

2. Review of the elements of grammar. Advanced grammar. Committing German model sentences illustrating the principles of grammar. Conversational exercises based thereon. Reading literary prose such as Storm's Immensee. Freshman, *a, e;* second term [2]. Professor Huss or Mr. Priest. Monthly written recitations.

3. Review of advanced grammar. Reading literary prose such as von Hillern's Höher als die Kirche or Heyse's L'Arrabbiata. Committing German model sentences. Conversational exercises. Sophomore, *a;* first term [3]. Professor Huss. Sophomore, *e;* first term [2]. Mr. Priest. Monthly written recitations.

4. Introductory scientific prose. The construction of the German period. Goethe's Hermann und Dorothea. Conversational exercises. Sophomore *a;* second term [3]. Professor Huss. Sophomore, *e;* second term [2]. Mr. Priest.

5. Schiller's dramas with lectures thereon. Junior, *c, g* elective; first term [2]. Professor Huss.

6. Lessing's critical writings. Classical lyrics and ballads. Junior *c, g* elective; second term [2]. Professor Huss.

7, 8. Goethe's Faust. Lectures on the medieval epics and on the life and works of Klopstock, Lessing, Wieland, Herder, Schiller, and Goethe. Scientific monographs. Composition. Senior, *c, g* elective; both terms [2]. Professor Huss.

French.

PROFESSOR LEWIS AND MR. WATSON.

1. Elementary French. Required study for those who offer German for entrance and excludes from German 1. Freshman *a;* first term [4]; *e;* first term [3]. Professor Lewis or Mr. Watson. *Whitney:* Brief French Grammar. *Verne:* Michel Strogoff. *Super:* French Reader. Exercises based on *Michel Strogoff.*

2. French. Freshman, *a, e;* second term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Super:* French Reader. *Müller:* Les grandes Découvertes Modernes. *Herdler:* Scientific French Reader.

3. Advanced French. Sophomore, *a*, *e*; first term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Garrigues et De Monvel:* Simples Lectures sur les Sciences. *Melzi:* Practical Handbook of French Correspondence. *Van Daell:* Introduction to French Authors.

4. Advanced French. Sophomore, *a*, *e*; second term [2]. Professor Lewis or Mr. Watson. *Sadler:* Translating English into French. *Van Daell:* Introduction to French Authors. *Freeborn:* Morceaux Choisis d'Alphonse Daudet. *Hugo:* La Chute.

5. French Literature. Lectures on the principal authors of the 17th century. Junior, *g* elective; first term [2]. Professor Lewis. This course, as well as all the other French courses of the Junior and Senior years, are open only to those students who have satisfactorily completed the work preceding each separate course. All lectures in French Literature will be accompanied with considerable collateral reading beside the regular class-room work. *Warren:* French Prose of the 17th Century. *Corneille:* Le Cid. *Molière:* Le Bourgeois Gentilhomme. *Molière:* Les Précieuses Ridicules. *Racine:* Athalie.

6. French Literature. Lectures on the principal authors of the 18th century. Junior, *g* elective; second term [2]. Professor Lewis. *Cohn and Woodward:* French Prose of the 18th century. *Voltaire:* Zaïre. *Montesquieu:* Lettres persanes. *Sedaine:* Philosophe sans le savoir. *Beaumarchais:* Le Barbier de Séville. *Beaumarchais:* Le Mariage de Figaro. *Bernardin de Saint-Pierre:* Paul et Virginie.

7. French Literature. Lectures on the principal authors of the 19th century. Senior, *g* elective; first term [2]. Professor Lewis. *Fontaine:* Les Prosateurs du 19e Siècle. *Warren:* Selections from Victor Hugo. *Hugo:* Hernani. *De Vigny:* Le Cachet Rouge. *Dumas:* L'Evasion du Duc de Beaufort. *Souvestre:* Le Mari de Madame de Solange. *Musset:* Pierre et Camille. *Musset:* On ne badine pas avec l'amour. *Harper and Livingood:* Contes de Balzac. *Balzac:* Le Curé de Tours. *Augier:* Le Gendre de M. Poirier. *Pailleron:* Le monde où l'on s'ennuie. *Price:* Choix d'Extraits de Daudet. *Daudet:* Lettres de mon Moulin.

8. French Literature. Lectures on French Poetry. Senior, *g* elective; second term [2]. Professor Lewis. *Bowen:* French Lyrics. *Masson:* La Lyre française. *Warren:* Selections from

Victor Hugo. *Hugo:* Légende des Siècles. *Lamartine:* Méditations. *Gautier:* Emaux et camées.

9, 10. Old French Readings. Senior, *g* elective, open also to Academic Seniors; both terms [2]. Professor Lewis. This course is open to all Seniors who have satisfactorily completed the previous three years' work in French. For the text-books used, see Nos. 11 and 12 of Academic French.

Mathematics.

PROFESSOR ROCKWOOD, MR. BROOKS, AND MR. REID.

1. Algebra. Freshman, *a*, *e;* first term [2]. Mr. Reid. *Wells:* College Algebra.

2. Theory of Equations. Freshman, *a*, *e;* second term [2]. Mr. Reid. *Wells:* College Algebra.

3. Spherical Geometry. Freshman, *a*, *e;* half of first term [1]. Prof. Rockwood. *Wentworth:* Geometry.

5, 6. Trigonometry; plane with applications to mensuration, and spherical. Freshman, *a;* first and second terms [2]. Mr. Reid. *Wells:* Trigonometry.

7. Trigonometry; plane reviewed with applications to mensuration, spherical. Freshman, *e;* first term [2½]. Mr. Brooks. *Wells:* Trigonometry.

8. Analytical Geometry commenced. Freshman, *a;* second term [1]. Mr. Reid. *C. Smith:* Conic Sections.

9. Analytical Geometry of two dimensions. Sophomore, *a*, *e;* first term [4]. Professor Rockwood or Mr. Brooks. *C. Smith:* Conic Sections.

10. Analytical Geometry of two dimensions. Freshman, *e;* second term [3]. Mr. Brooks. *C. Smith:* Conic Sections.

12. Differential and Integral Calculus. Sophomore, *a;* second term [4]. Mr. Brooks. *Osborne:* Calculus.

14. Differential and Integral Calculus. Sophomore, *e;* second term [5]. Professor Rockwood. *Osborne:* Calculus.

Physics.

PROFESSORS BRACKETT AND MAGIE, MR. WATERMAN, AND DR. LOOMIS.

1, 2. General Physics; mechanics, heat, magnetism, electricity, sound, light. Junior, *a*, *e;* both terms [4]. Dr. Loomis. *Anthony and Brackett:* Elementary Text-Book of Physics.

The elective courses in Physics for the Junior and Senior years are the same as those in the Academic department.

General Chemistry.

PROFESSOR MCCAY.

1, 2. Course in General Chemistry. Experimental lectures and recitations. Freshman, *a*, *e*; both terms [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

Applied Chemistry and Mineralogy.

PROFESSOR CORNWALL, MR. NEHER, AND MR. PHILLIPS.

The term "exercises a week" in the statements below means *single hours* for lectures and recitations, but *exercises* of two or two and one-half hours each for laboratory work. Usually where a course embraces both class-room and laboratory work one-fourth of the exercises are in the class-room. Special students are not admitted to work in Analytical Chemistry and Mineralogy without previous examination as to their fitness for the work; and all such students must take the Mathematics of the Freshman year before beginning Mineralogy. Courses 14, 15 and 16 are not open to special students.

1, 2. Qualitative Analysis; including the commoner metals and acids, both in simple and mixed substances. Sophomore, *a*; one term [4]. Mr. Neher. *Neher:* Notes on Qualitative Analysis.

3, 4. Quantitative Analysis; introductory course, including simple salts, limestone, coal, felspar, etc., and sugars, milk and similar food analysis. Junior, *c*; first term [2], second term [5]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes.

5. Qualitative Analysis; advanced course. Junior, *c*; first term [2]. Professor Cornwall and Mr. Neher. *Fresenius:* Qualitative Chemical Analysis.

7. Organic Chemistry: lectures and recitations on typical organic compounds, with applications to study of water, foods, poisons, disinfectants, etc. Junior, *c*, *g* elective; first term [2]. Professor Cornwall.

8. Quantitative Analysis; shorter introductory course, including simple salts, sugar, foods, etc.; must be preceded by the lecture course 7. Senior, *g*, elective; second term [4]. Professor Cornwall and Mr. Neher. *Appleton:* Quantitative Analysis.

9, 10. Quantitative Analysis; advanced: including complex substances, Iron, Steel and Technical Analysis in general. Senior, *e;* first term [6], second term [6]. Professor Cornwall and Mr. Neher. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes. *Chemical Periodicals.*

11. Volumetric Analysis. Senior, *e;* first term [1]. Mr. Neher. *Mohr:* Titrirmethode. *Sutton:* Volumetric Analysis.

13, 14. Technical Chemistry; lectures and recitations on applications of Chemistry to Arts and Manufactures; must be preceded by the lecture course 7. Senior, *e, g* elective; both terms [1]. Professor Cornwall.

16. Assaying; furnace assay of gold, silver and lead ores; lectures and laboratory work. Junior and Senior, *e;* second term. [2]. Professor Cornwall and Mr. Phillips. *Ricketts:* Notes on Assaying.

17 or 18. Determinative Mineralogy (Blowpipe Analysis), preceded by a short course of lectures, including elements of crystallography. Sophomore, *a;* one term [4]; *e;* first term [3]. Professor Cornwall and Mr. Phillips. *Cornwall:* Manual of Blowpipe Analysis and Determinative Mineralogy.

19, 20. Mineralogy; advanced: lectures, recitations and practice in theoretical, determinative and optical mineralogy. Senior, *e, g* elective; both terms [1]. Professor Cornwall. *Moses and Parsons:* Mineralogy.

Biology.

PROFESSORS MACLOSKIE, LIBBEY, RANKIN AND MCCLURE.

2. Human Anatomy and Physiology. Lectures, illustrated by skeletons, manikin and diagrams. Freshman, *a;* second term [1½]. Professor Macloskie. *Martin:* Human Body.

3. Elementary Botany. Dissection, description and classification of flowering plants. Sophomore, *a;* first term [2]. Professor Rankin. *Macloskie:* Elementary Botany. *Gray:* Manual of Botany.

4. Elementary Zoology. Lectures and demonstrations. Sophomore, *a;* second term [3]. Professors Macloskie and Rankin. *Packard:* Zoology.

The elective courses in Biology for the Junior and Senior years are the same as for the Academic department. (See earlier page.)

Graphics.

PROFESSOR WILLSON AND MR. TORREY.

The following courses involve recitation and examination upon the theory, as well as practical work in the draughting-room.

1. Elementary Technical Draughting. Line and brush shading; conventional representations; lettering; higher plane curves; motion curves; oblique and orthographic projection; working drawings. Freshman, *a;* first term [3]; *e;* first term [4]. Professor Willson and Mr. Torrey. *Willson:* Theoretical and Practical Graphics.

2. Orthographic projection, continued; working drawings; tracings. Freshman, *e;* first half of second term [3]. Professor Willson and Mr. Torrey.

4. Technical Free-Hand Drawing. Freshman, *a;* first half of second term [3]. Mr. Torrey.

6. Practical graphical work; either bridges, roof trusses, machinery, or sheet metal pattern making. Sophomore, *e;* second term [1]. Professor Willson.

7. Descriptive Geometry; pure, and also as applied to developable, double-curved, and warped surfaces, and including spherical projections and trihedrals. Junior, *e, g* elective; first term [3]. Professor Willson. *Willson:* Theoretical and Practical Graphics.

8. Shades, Shadows, and Perspective; mathematical theory, with applications mainly to architectural subjects. Junior, *e, g* elective; second term [2]. Professor Willson and Mr. Torrey. *Church:* Shades, Shadows, and Perspective. *Wright:* Architectural Perspective.

9a. Stereotomy. Descriptive geometry, applied to the solution of problems in stone-cutting, which are likely to arise in railroad

or architectural construction. Senior, *e*, *g* elective; part of first term [2]. Professor Willson. *Warren:* Stone-Cutting.

9b. Valve Motion. Senior *e*, *g* elective; part of first term [2]. Professor Willson. Lectures.

10. Mechanism (Theory) and Machine Drawing. Senior *e*, *g* elective; second term [2]. Professor Willson and Mr. Torrey. *Stahl and Wood:* Elementary Mechanism.

Surveying.

PROFESSOR SMITH.

1. Surveying. Theory and practice with special reference to business life. Junior, *g* elective; first term [2]. Professor Smith.

Mechanics.

PROFESSORS MCMILLAN AND SMITH AND MR. FRASER.

1, 2. Rational Mechanics; analytic and graphic. Junior, *e*, *g* elective; both terms [3]. Professor Smith and Mr. Fraser.

3. Elasticity and Strength of Materials. Senior, *e*, *g* elective; second year, *l;* first term [3]. Professor Smith.

5. Roofs and Bridges. Senior, *e;* first term [7]. Professor McMillan and Mr. Fraser.

6. Stability of Structures. Senior, *e;* second term [3]. Professor Smith.

8. Motors. Senior *e*, *g* elective; second term [4]. Professor McMillan and Mr. Fraser. *Rankine:* Steam Engine.

Constructions.

PROFESSORS MCMILLAN AND SMITH.

1. Structural Materials and Tests: Foundations. Senior, *e;* first term [2]. Professor Smith. Lectures and laboratory work.

2. Construction of Water Works. Senior, *e;* second term [2]. Professor Smith. Lectures.

4. Sewerage and Drainage. Senior, *e;* second term [2]. Professor McMillan. Lectures.

6. Roads. Senior, *e;* second term [2]. Professor McMillan. Lectures.

Geodesy.

PROFESSOR HARRIS AND MR. FRASER.

2. Line measurement and farm surveying; recitations and field work. Freshman, *e;* second term [1½]. Mr. Fraser. *Staley-Gillespie:* Land Surveying.

3. Platting of field notes; topographical drawing in pen work and colors. Sophomore, *e;* first term [5]. Professor Harris and Mr. Fraser. *McMillan-Smith:* Topographical Drawing.

4. Transit work and levelling; recitations, field work and mapping. Sophomore, *e;* second term [6]. Professor Harris. *Staley-Gillespie:* Land Surveying.

5. Town, mine and hydrographic surveying; recitations, field work and mapping. Junior, *e;* first term [4]. Professor Harris. Lectures.

6. Railroad surveying; recitations, field work and office work. Junior, *e;* second term [5]. Professor Harris. *Searles:* Field Engineering.

DEPARTMENT OF ELECTRICAL ENGINEERING.

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The special course of study in electricity occupies two years of graduate work.

REQUIREMENTS FOR ADMISSION.

I. Graduates of the College, either in the Academic Department or in the John C. Green School of Science, who have taken satisfactory courses, will be admitted to the course in Electrical Engineering without examination.

II. Applicants who are graduates of other colleges must satisfy the Professors in charge that they have sufficient knowledge of mathematics, including differential and integral calculus, of physics and chemistry, and of French and German, to enable them to pursue the course with profit.

III. Applicants who are not graduates of any college may be admitted to the course if they show their fitness for it on examination in mathematics to the completion of the calculus, analytic mechanics, mechanical drawing and descriptive geometry, general and analytical chemistry, geology, astronomy, English language and literature, French and German.

IV. Students, not candidates for a degree, may be received by special arrangements with the Professors in charge.

Course of Study.

First Year:—The mathematical theory of Electricity. *Duhem:* Leçons sur l'Électricité et le Magnétisme: *Maxwell* and other authors.

Elementary Electrical Measurements, with reference to Stewart and Gee, Kohlrausch, Slingo and Brooker, Gray, etc. Two days in the week are left free for this work.

Strength of Materials and Mechanism, each, two hours a week, and Theory of Machines, three hours a week for half the year, are taken with the Senior Class in the Civil Engineering Department.

Second Year:—The Theory of Electrical Measurements. *Fleming:* Alternate Current Transformer. *Kittler.* Four hours a week for half the year.

Theory of Dynamo Construction. *Thompson:* Dynamo Electrical Machinery, with collateral lectures.

Technical Applications of Electricity in Telegraphy, Electrometallurgy and Electro-chemistry, Electric lighting, Transmission of power. Four lectures a week throughout the year.

Advanced Electrical Measurements and Electrical Testing.

In addition to these courses a meeting is held once a week, at which reports on the current electrical literature are made by the students.

Degree.

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application, he must present a thesis on some subject connected with electrical science.

EXHIBIT OF STUDIES.

NOTE.—The numbers in column indicate exercises per week. The numbers immediately after subjects refer to courses as given on pp. 87-94. The Roman and Arabic numerals in parentheses refer to subjects and courses as given in the Statement of Courses for the Academic Department on pp. 87-89.

COURSE IN GENERAL SCIENCE (*a*, *g*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 8, 5	5	Mathematics 2, 4, 6	5
German 1 or French 1	4	German 2	2
		French 2	2
Graphics 1	3	Graphics 4	1½
General Chemistry 1	2	General Chemistry 2	2
English (XI 1)	2	Anatomy—Biol. 2	1½
		English (XI 2)	2

SOPHOMORE YEAR.

Mathematics 7	4	Mathematics 8	4
German 3	3	German 4	3
French 3	2	French 4	2
Applied Chemistry 1 or Mineralogy 15	4	Applied Chemistry 2 or Mineralogy 16	4
Botany—Biol. 3	2	Zoology—Biol. 4	3
English	1		

JUNIOR YEAR.

REQUIRED.

Physics (XX 5)	4	Physics (XX 6)	6
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 7 or 8 exercises.		Student takes 6 or 7 exercises.	
Jurisprudence (v 3)	2	Intern. Law (v 4)	2
Art (vi 1)	2	Art (vi 2)	2
Graphics 7	3	Graphics 8	2
		Middle English (x 18)	2
Solid Geom. (xviii 11)	2	Solid Geom. (xviii 12)	2
Applied Chem. 7	2	Vert. Anatomy (xxiv 6)	2
Spanish (xvii 1)	2	Spanish (xvii 2)	2
English Lit. (xi 5)	2	English Lit. (xi 6)	2
		Invert. Morph. (xxiv 8)	2
Surveying 1	2	Anal. Mechanics (xx 6)	2
Geology (xxiii 3)	2	Geology (xxiii 4)	2
Ancient History (iv 5)	2	Med. History (iv 6)	2
Bible	2	Bible	2
Applied Mech's 1	3	Applied Mech's 2	3
Graphics 7	3		
Italian (xvi 1)	2	Italian (xvi 2)	2
History (iv 3)	2	Physics (xx 4)	2
Diff. Equations (xviii 9)	2	Diff. Equations (xviii 10)	2
Biology (xxiv 3)	2	Histology (xxiv 8)	2
Theor. Chemistry (xxi 3)	2	Exp. Psychology (ii 6)	2
Old English (x 17)	2	Pract. Botany (xxiv 4)	3
German 7	2	German 8	2
French 5	2	French 6	2

SENIOR YEAR.

REQUIRED.

Ethics (i 1)	2	Evid. Christianity (i 2)	1
		Political Econ. (v 2)	3

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 12 or 13 exercises.		Student takes 11 or 12 exercises.	
		American Lit. (xi 12)	2
		Physical Geog. (xxii 2)	2
		French 8	2
		Motors 8	4

Jurisprudence (v 8)	2
Art (vi 1)	2
Theism (i 7)	2
Pract. Physics (xx 7)	2
Spanish (xvii 1)	2
Solid Geom. (xviii 11)	2
Old French (xv 11)	2
Mamm. Anat. (xxiv 13)	2
Art (vi 3)	2
Astronomy (xix 3)	2
Gothic (xi 13)	2
Hig. Pl. Cur. (xviii 15)	2
Osteology (xxiv 9)	2
Graphics 9	2
Hist. of Philos. (ii 8)	2
German 9	2
Bible	2
Adv. Exp. Psych. (ii 17)	2
Old English (xi 7)	2
Theor. of Func. (xviii 17)	2
Str. of Materials 8	3
Metaphysics (ii 13)	2
Geology (xxiii 8)	2
Diff. Equations (xviii 9)	2
Physiology (xxiv 11)	2
Art (vi 5)	2
Advanced Logic (ii 9)	2
Tech. Chemistry 13	1
Italian (xvi 3)	2
Italian (xvi 1)	2
English Lit. (xi 9)	2
Phys. Psychology (ii 15)	2
Physics (xx 9)	2
Mineralogy 19	1
French 7	2
Ad. Gen. Psych. (ii 19)	2
Pract. Astron. (xix 5)	2
Poetics (xii 9)	2

Intern. Law (v 4)	2
Art (vi 2)	2
Old French (xv 12)	2
Anal. Chem. 8	4
Theism (1 8)	2
Pract. Physics (xx 8)	2
Spanish (xvii 2)	2
Solid Geom. (xviii 12)	2
Histology (xxiv 10)	2
Middle English (xi 8)	2
Art (vi 6)	2
Graphics 10	2
Outlines of Philos. (ii 14)	2
Embryology (xxiv 12)	2
Hig. Pl. Cur. (xviii 16)	2
Palæontology (xxiv 14)	4
Anal. Chem. 8	2
Hist. of Philos. (ii 10)	2
German 10	2
Palæontology (xxiv 14)	4
Bible	2
Adv. Exp. Psych. (ii 18)	2
Theor. of Func. (xviii 18)	2
Italian (xvi 4)	2
Anal. Mech's (xx 6)	2
Geology (xxiii 4)	2
Hist. Polit. Econ. (v 10)	2
Diff. Equations (xvii 10)	2
Art (vi 4)	2
Advanced Logic (ii 10)	2
Tech. Chem. 14	1
Science and Relig. (i 4)	2
Italian (xvi 2)	2
Histology (xxiv 8)	2
Mineralogy 20	1
Physics (xx 4)	2
Motors 8	4
English Lit. (xi 10)	2
Pract. Astron. (xix 6)	2

COURSE IN CHEMISTRY (*a*, *c*).

The studies of the Freshman and Sophomore years are the same as those in the course in General Science.

JUNIOR YEAR.

First Term.		*Second Term.*	
Physics (XX 5)	4	Physics (XX 6)	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3
German 7	2	German 8	2
Applied Chem. 3, 5, 7	6	Applied Chem. 4	5

SENIOR YEAR.

Ethics (I 1)	2	Evid. Christianity (I 2)	1
German 9	2	German 10	2
Theor. Chemistry (XXI 3)	2		
Applied Chem. 9, 11, 17	8	Ap. Chem. 8, 10, 12, 14	11
Elective (from list open to Seniors in General Science course)	2	Elective (from list open to Seniors in General Science course)	2

COURSE IN CIVIL ENGINEERING (*e*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 3, 5	5	Mathematics 2, 4, 6	5
German 1 or French 1	3	German 2	2
		French 2	2
Graphics 1	4	Graphics 2	2½
General Chemistry 1	2	General Chemistry 2	2
English (XI 1)	2	English (XI 2)	2
		Geodesy 2	1½

SOPHOMORE YEAR.

Mathematics 7	4	Mathematics 10	5
German 3	2	German 6	2
French 3	2	French 4	2
Geodesy 3	5	Geodesy 4	6
Mineralogy 5	3	Graphics 6	1

JUNIOR YEAR.

Physics (XX 5)	4	Physics (XX 6)	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Mechanics 1	3	Mechanics 2	3
Geodesy 5	4	Geodesy 6	5
Graphics 7	3	Graphics 8	2

SENIOR YEAR.

Astronomy (XIX 5)	2	Evid. Christianity (I 2)	1
Str. of Materials 3	3	Stab. of Structures 6	3
Roofs and Bridges 5	7	Motors 8	4
Constructions 1	2	Water Works 2	2
Graphics 9	2	Drainage 4	2
		Roads 6	2
		Graphics 10	2

SCHOOL OF SCIENCE FRESHMAN FIRST TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Graphics *a* 	Graphics *e* 	Trig. *a* 1 Graphics *e* 2	Trig. *a* 1 Graphics *e* 1	Graphics *a* Algebra *e* 1	Graphics *a* Algebra *e* 1
9	Chemistry *e* 	Chemistry *a* 	Trig. *a* 2 Trig. *e* 1	Trig. *a* 2 Trig. *e* 2	Algebra *e* 2 	Algebra *e* 2
10			English *e*	German *e* 1 Graphics *e* 2	Algebra *a* 1 Graphics *e* 2	Algebra *a* 1 Graphics *e* 1
11	Chemistry *a* German *e* 1 French *e* 2	Chemistry *e* German *a* 1 French *a* 2	English *a*	German *a* 1 French *a* 2	Algebra *a* 2 Trig. *e* 1	Algebra *a* 2 Trig. *e* 2
3				Graphics *e* 1		
4	German *a* 1 French *a* 2 English *e*	English *a* German *e* 1 French *e* 2		Math. *a* 1 French *e* 2	German *a* 1 French *a* 2 Math. *e* 2	
5				Math. *a* 2	Math. *e* 1	

SCHOOL OF SCIENCE FRESHMAN SECOND TERM SCHEDULE—1895-96.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8	Graphics† a 2	Graphics† a 1 English* a 1	Trig. a 1 An. Geom. e 1	Trig. a 1 Graphics† e German* e 1 An. Geom.* e 2	Theor. Eqs. a 1 Graphics† e English* e	Theor. Eqs. a 1 Graphics† e English* e
9	English† a 1 Anatomy* a Chemistry e	English a 2 Chemistry e	Trig. a 2 An. Geom. e 2	Trig. a 2	Theor. Eqs. a 2	Theor. Eqs. a 2
10	English† e 1 Geodesy* e 1		English a 1 Graphics† a 2 Theo. Eqs. e 1	Graphics† a 1 English a 2 Theor. Eqs. e 1	German a 1 An. Geom. e 1 Geodesy* e 2	German a 1 An. Geom. e 1
11	Chemistry a English† e French* e 2	Chemistry a English† e French* e 2 German* e 1	Theo. Eqs. e 2	Theor. Eqs. e 2	German a 2 An. Geom.† e 2	German a 2 An. Geom. e 2
8	French a 1 German† e 1 Geodesy* e 1	French a 1 German† e 1 Geodesy* e 1		Graphics† a 2 Anatomy* a Geodesy* e 2	Graphics† a 1 Anatomy* a Geodesy* e 2	
4	French a 2 German e 2	French a 2 German e 2		French e 1	French e 1	
5				An. Geom. a 1 French† e 2	An. Geom. a 2 French† e 2	

†During first half of the term. *During second half of the term.

SCHOOL OF SCIENCE SOPHOMORE FIRST TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 1 Geodesy *e* 1 Mineral. *e* 2	French *a* 1 German *a* 2 Geodesy *e* 1 Mineral. *e* 2	German *a* 1 French *e* 1	French *e* 1	Math. *a* 1 Geodesy *e* 1 Mineral. *e* 2	Math. *a* 1 Mineral. *e* 1 Geodesy *e* 2
9			Botany. *a* French *e* 2	German *a* 2 French *e* 2	Math. *a* 2	Math. *a* 2
10	German *a* 1 Mineral. *e* 1 Geodesy *e* 2	Botany *a* 2 Mineral. *e* 1 Geodesy *e* 2	Math. *a* 1 Geodesy *e* 1	Math. *a* 1 Geodesy *e* 1	An. Chem. *a* 1 Mineral. *a* 2 German *e* 1	An. Chem. *a* 1 Mineral. *a* 2 German *e* 1
11	German *a* 2	German *a* 1	Math. *a* 2 Math. *e* 2	Math. *a* 2 Math. *e* 2	German *e* 2	German *e* 2
3		Botany *a* 1		An. Chem. *a* 1 Mineral. *a* 2 Math. *e* 1 Geodesy *e* 2	An. Chem. *a* 1 Mineral. *a* 2 Math. *e* 1 Geodesy *e* 2	
4	English *a* Math. *e* 1	Math. *e* 1				
5	French *a* 2 Math. *e* 2	French *a* 2 Math. *e* 2				

SCHOOL OF SCIENCE SOPHOMORE SECOND TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 1 Math. *e* 1	French *a* 1 Math. *e* 1	German *a* 1 Graphics *e*	German *a* 1 Geodesy *e*	Math. *a* 1 French *e* 1	Math. *a* 1 French *e* 1
9	Math. *e* 2	Math. *e* 2	German *a* 2	German *a* 2	Math. *a* 2 French *e* 2	Math. *a* 2 French *e* 2
10	Geodesy *e*	German *a* 1 Geodesy *e*	Math. *a* 1 Math. *e* 1	Math. *a* 1 Math. *e* 1	Mineral. *a* 1 An. Chem. *a* 2 Math. *e* 1	Mineral. *a* 1 An. Chem. *a* 2 Geodesy *e*
11	Zoology *a*	German *a* 2	Math. *a* 2 Math. *e* 2	Math. *a* 2 Math. *e* 2	Math. *e* 2	
3	Zoology *a* Geodesy *e*	Zoology *a* Geodesy *e*		Mineral. *a* 1 An. Chem. *a* 2	Mineral. *a* 1 An. Chem. *a* 2	
4				German *e* 1	German *e* 1	
5	French *a* 2	French *a* 2		German *e* 2	German *e* 2	

SCHOOL OF SCIENCE JUNIOR FIRST TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 5 *g* Surveying *g*	English Lit. 5 *g* Surveying *g*	Italian 1 *g*	Italian 1 *g*
9	Astronomy *a,e*	Astronomy *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*
10	Jurisprudence Art 1 *g* Graphics *g,e* Ap. Chem. 3 *c*	Jurisprudence Art 1 *g* Graphics *g,e* Ap. Chem. 3 *c*	Ancient Hist. *g* Bible *g* Graphics *g,e* Ap. Chem. 5 *c*	Ancient Hist. *g* Bible *g* Ap. Mechs. 1 *g* Ap. Chem. 5 *c*	Ap. Mechs. 1 *g*	Ap. Mechs. *g*
11	Spanish 1 *g*	Spanish 1 *g*	Theor. Chem. 3 *g* Old English *g*	Theor. Chem. 3 *g* Old English *g* Ap. Mechs. 1 *e*	Psychology *a* Ap. Mechs. 1 *e*	History 3 *g* Ap. Mechs. 1 *e*
3	Solid Geom. 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*	Solid Geom. 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*		Biology 3 *g* Diff. Equations *g* Geodesy *e*	Biology 3 *g* Diff. Equations *g* History 3 *g* Geodesy *e*	
4	French *g*	French *g*		German *g,c*	German *g,c*	
5	Psychology *a*			Geology 3 *g*	Geology 3 *g*	

SCHOOL OF SCIENCE JUNIOR SECOND TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 6 *g* Invert. Morph. *g* Geodesy *e*	English Lit. 6 *g* Invert. Morph. *g*	Physics 4 *g* Italian 2 *g*	Physics 4 *g* Italian 2 *g* Geodesy *e*
9	Geology 2 *a,e*	Geology 2 *a,e*	Logic *a*	Physics *a,e*	Physics *a,e*	
10	Intern. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Intern. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Med. History *g* Bible *g* Ap. Chem. 4 *c* Geodesy *e*	Med. History *g* Bible *g* Ap. Chem. 4 *c* Ap. Mechs. 2 *g*	Ap. Mechs. 2 *g*	Ap. Mechs. 2 *g*
11	Spanish 2 *g*	Spanish 2 *g*	Pract. Bot. 4 *g*	Pract. Bot. 4 *g* Ap. Mechs. 2 *e*	Logic *a* Ap. Mechs. 2 *e*	Logic *a* Ap. Mechs. 2 *e*
8	Solid Geom. 12 *g* Mid. English *g* Vert. Anatomy *g*	Solid Geom. 12 *g* Mid. English *g* Vert. Anatomy *g*		Ex.Psy.(2 p.m.) *g* Histol.8 (2 p.m.) *g* Diff. Equations *g* Geodesy *e*	Ex.Psy.(2 p.m.) *g* Histol.8 (2 p.m) *g* Diff. Equations *g* Geodesy *e*	
4	French *g*	French *g*		German *g,c*	German *g,c*	
5	Physics *a,e*	Physics *a,e*		Geology 4 *g* Anal. Mechs. *g*	Geology 4 *g* Anal. Mechs. *g*	

SCHOOL OF SCIENCE SENIOR FIRST TERM SCHEDULE—1895-96.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		Gothic *g* H. P. Curves *g* Osteology *g*	Gothic *g* H. P. Curves *g* Osteology *g* Graphics *g,e*	Physiology *g* Graphics *g,e*	Phys. Psych. *g* Italian 1 *g* Physics 9 *g* Eng. Lit. 9 *g* Ap. Chem. 11 *c*	Phys. Psych. *g* Italian 1 *g* Physics 9 *g* Eng. Lit. 9 *g* Mineralogy 19 *g,c*
9	French *g* R. & Bridges *e*	French *g* R. & Bridges *e*	Hist. of Phil. *g*	Hist. of Phil. *g*	Str. Mats. *g,e*	Str. Mats. *g,e*
10	Jurisprud. *g* Art 1 *g* Ap. Chem. 9 *c*	Jurisprud. *g* Art 1 *g* Ap. Chem. 9 *c*	Bible *g* German *g,c*	Bible *g* German *g,c*	Ap. Chem. 9 *c*	Ap. Chem. 9 *c*
11	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Adv. Ex. Psy. *g* Old English *g* Theor. of Fns. *g* Str. Mats. *g,e* Theor. Chem. *c*	Adv. Ex. Psy. *g* Old English *g* Theor. of Fns. *g* R. & Bridges *e* Theor. Chem. *c*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych. *g*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych. *g*
3	Old French *g* Geometry 11 *g* Mamm. Anat. *g*	Old French *g* Geometry 11 *g* Mamm. Anat. *g*		Physiology *g* Diff. Equations *g*	Diff. Equations *g* Ap. Chem. 9 *c*	
4	Art 8 *g* Astronomy 8 *g* R. & Bridges *e*	Art 8 *g* Astronomy 8 *g* R. & Bridges *e*		Art 5 *g* Adv. Logic *g* Italian 8 *g* Tech. Chem. *g, c* Constructions 1 *e*	Art 5 *g* Adv. Logic *g* Italian 8 *g* Constructions 1 *e*	
5	Ethics *a*	Ethics *a*		Metaphysics *g* Geology 8 *g*	Metaphysics *g* Geology 8 *g*	

UNIVERSITY COURSES.

The following courses are classed as University courses and are such as may properly be attended by candidates for the Master's or Doctor's degree. As may be seen from the more detailed statements to which reference is made, some of these courses are open to graduates only, while others are also undergraduate electives. In many subjects other special courses may be arranged on consultation with the Professors.

MORAL PHILOSOPHY: Courses 1 to 10.

MENTAL PHILOSOPHY: Courses 3 to 31.

HISTORY AND POLITICAL SCIENCE: Courses 5 to 12.

JURISPRUDENCE AND POLITICAL ECONOMY: Courses 8 to 12.

ARCHÆOLOGY AND THE HISTORY OF ART: Courses 3 to 6.

GREEK: Courses 15 to 20.

LATIN: Courses 15 to 22.

SANSKRIT: Courses 1 to 6.

BIBLICAL LITERATURE: Courses 7 and 8.

ENGLISH: Courses 9 to 16.

ORATORY AND ÆSTHETIC CRITICISM: Courses 9 and 10.

GERMAN: Courses 9 to 12.

FRENCH: Courses 7 to 16.

ITALIAN: Courses 3 to 6.

MATHEMATICS: Courses 12 to 24.

ASTRONOMY: Courses 7 to 10.

PHYSICS: Courses 9 to 14.

PHYSICAL GEOGRAPHY: Course 4.

GEOLOGY: Courses 3 and 4.

CHEMISTRY: Course 7. For statement of other courses see the courses offered in the School of Science.

BIOLOGY: An advanced course in Biology has been established in connection with the Geological, Zoological, Botanical, and Chemical departments, the objects in view being: (1) to foster a spirit of original research, (2) to qualify advanced students to become teachers. This course is open to college graduates, also to students presenting diplomas from recognized medical schools.

UNIVERSITY COURSES FOR GRADUATES.

In addition to the courses open to undergraduates, there are courses of instruction open to resident graduates of this and other colleges, under the following regulations:

Every instructor in the College shall be at liberty, with the leave of the Faculty, to give instruction to graduates. He shall meet with his class for at least one hour a week, and not more than three hours a week, during the Academic year, and shall require the members of his class to undergo examinations on the course pursued.

Each graduate student attending instruction regularly, and passing the examinations, is entitled to a certificate stating what he has done, signed by the President in behalf of the College.

Students by pursuing these courses may also qualify themselves for the degrees: Master of Arts, Master of Science, Doctor of Philosophy, or Doctor of Science, according to the regulations prescribed under the heading "Degrees."

Each graduate student shall pay ten dollars, or such sum as the Faculty may require, for every course of instruction that he enters requiring an hour per week, and shall defray whatever expense may be incurred by the use of instruments and materials employed by him. This charge may be remitted in whole or in part when the circumstances of the student require it. All undergraduate courses of lectures or instruction are also open to graduate students without the payment of any fees except for material used. Charges will be made for courses in analytical chemistry, the amount to depend on the nature of the course pursued.

Every applicant for these courses should register his name and college at the Registrar's office.

Arrangements for the particular courses should be made by application to the individual instructors.

UNIVERSITY COURSES.

The following courses are classed as University courses and are such as may properly be attended by candidates for the Master's or Doctor's degree. As may be seen from the more detailed statements to which reference is made, some of these courses are open to graduates only, while others are also undergraduate electives. In many subjects other special courses may be arranged on consultation with the Professors.

MORAL PHILOSOPHY: Courses 1 to 10.

MENTAL PHILOSOPHY: Courses 3 to 31.

HISTORY AND POLITICAL SCIENCE: Courses 5 to 12.

JURISPRUDENCE AND POLITICAL ECONOMY: Courses 3 to 12.

ARCHÆOLOGY AND THE HISTORY OF ART: Courses 3 to 6.

GREEK: Courses 15 to 20.

LATIN: Courses 15 to 22.

SANSKRIT: Courses 1 to 6.

BIBLICAL LITERATURE: Courses 7 and 8.

ENGLISH: Courses 9 to 16.

ORATORY AND ÆSTHETIC CRITICISM: Courses 9 and 10.

GERMAN: Courses 9 to 12.

FRENCH: Courses 7 to 16.

ITALIAN: Courses 3 to 6.

MATHEMATICS: Courses 12 to 24.

ASTRONOMY: Courses 7 to 10.

PHYSICS: Courses 9 to 14.

PHYSICAL GEOGRAPHY: Course 4.

GEOLOGY: Courses 3 and 4.

CHEMISTRY: Course 7. For statement of other courses see the courses offered in the School of Science.

BIOLOGY: An advanced course in Biology has been established in connection with the Geological, Zoological, Botanical, and Chemical departments, the objects in view being: (1) to foster a spirit of original research, (2) to qualify advanced students to become teachers. This course is open to college graduates, also to students presenting diplomas from recognized medical schools.

It is not restricted to students who are candidates for a degree, if the applicants possess sufficient elementary knowledge to profit by the instruction.

This course is of a comprehensive and elastic character, and according to the requirements and wishes of different students, includes much laboratory work under the direction of the instructor. At the close of the first term, the student may select a department of special study for his thesis, which must present the results of original work.

DEGREES.

Students of the College, who have passed all their examinations and fulfilled all the prescribed conditions are ordinarily recommended by the Faculty for a degree. The degrees thus given are Bachelor of Arts (p. 32), Bachelor of Science (p. 82), Civil Engineer (p. 82) and Electrical Engineer (p. 96).

Master of Arts. (A.M.)

The degree of Master of Arts may be conferred only upon a Bachelor of Arts of this or of any approved college who shall have devoted one year exclusively to graduate study in the College under the care of the Faculty, passing examinations upon the studies pursued; or shall have taken at least one graduate course each term for two years and passed satisfactory examinations upon his work. The degree may also be conferred upon a Bachelor of Arts of this College who shall have submitted to the Faculty a satisfactory dissertation, ordinarily of not less than five thousand words, on some literary, philosophical or scientific subject, not earlier than the first of April in the third year after graduation. The fee for this degree is ten dollars, to be paid to the College Treasurer either before the candidate enters his last examinations, or else when his dissertation is handed in.

Master of Science. (M.S.)

The degree of Master of Science may be conferred upon any Bachelor of Science of an approved institution who shall have devoted one year exclusively to graduate study in the College under the care of the Faculty in such of the following subjects as the Faculty shall prescribe, and who shall have shown satisfactory proficiency therein by dissertations and examinations: biology, mathematics, rational and applied mechanics, practical astronomy, applied chemistry, qualitative analysis, quantitative analysis, physics, mineralogy, graphics, modern languages.

Any Bachelor of Arts, who after examination may be found to be prepared to pursue a graduate course in science, may become a candidate for the degree of Master of Science on the same conditions as a Bachelor of Science. The fee for this degree is ten dollars, to be paid to the College Treasurer before the candidate enters his last examinations.

Degree of Doctor of Philosophy (Ph.D.) in Princeton College.

Subject to the regulations hereinafter stated, the degree of Doctor of Philosophy may be conferred upon any Bachelor of Arts of Princeton College, or of any approved college whose Academic course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Arts, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

Regulations.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the College in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study. They are also examined in the group of subjects connected with the general department of their proposed studies as detailed below:

A. In the Department of Philosophy: Ability to read Latin with a fluency sufficient to ensure its use as an instrument of advanced study; general psychology and logic; history of philosophy, ancient and modern; outlines of general history.

B. In the Department of Language and Literature: Outlines of general history; general knowledge of the English language and literature; ability to read Greek and Latin with fluency sufficient to ensure their use as instruments of advanced study.

C. In one of the following six groups in the Department of Mathematics and Science:

1. In Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and the differential and integral calculus.

2. In Astronomy: Elementary mathematics, including trigonometry and analytical geometry; general astronomy; general physics.

3. In Physics: Elements of mathematics, including trigonometry and analytical geometry; general physics.

4. In Chemistry: General chemistry; general physics.

5. In Geology and Physical Geography: Elements of geology, zoology and botany; general chemistry.

6. In Biology: Elements of zoology and botany; general chemistry.

II. *Chief Subject of Study.*—Every candidate, after passing his preliminary examination and before entering on his studies for the Doctor's degree, shall announce which one of the subjects in the appended lists he selects as his chief subject, and shall thereupon present to the Committee on University Degrees and Fellowships for their approval a statement of the said chief subject to which he intends devoting himself while a candidate, with such fulness of explanation as the committee may require.

A. Department of Philosophy: Logic, psychology, ethics, metaphysics, history of philosophy, philosophy of religion, history, political economy, science of politics, jurisprudence, archæology and art.

B. Department of Language and Literature: Sanskrit, Greek, Latin, French, German, Italian, English (including Anglo-Saxon).

C. Department of Mathematics and Science: Mathematics, astronomy, physics, chemistry, geology and physical geography, biology.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. One of these must be logic, psychology, ethics, or the history of philosophy, unless the candidate has chosen for his chief subject any one of those just named or else passes a satisfactory special examination on some one of them before entering upon his course

as a candidate. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken, as well as the following which are not thus enumerated: physiological psychology, pedagogics.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted, the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on University Degrees and Fellowships. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty, and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Philosophy carries with it that of Master of Arts.

VII. *Fees.*—Those who apply for the degree shall pay to the College Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Degree of Doctor of Science (D.Sc.) in Princeton College.

Subject to the regulations hereinafter stated, the degree of Doctor of Science may be conferred upon any Bachelor of Science

of Princeton College, or of any approved college or scientific school whose course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Science, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the College in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study and research.

They are also examined in the particular group of subjects connected with the subject of their proposed studies, as detailed below:

1. Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and of the differential and integral calculus.

2. Astronomy: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general astronomy, general physics.

3. Physics: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general physics, general chemistry.

4. Chemistry: General chemistry, general physics.

5. Mineralogy: Elements (including crystallography), general chemistry, general physics.

6. Geology and Physical Geography: Elements of geology, zoology and botany, general chemistry.

7. Biology: Elements of zoology and botany, general chemistry.

II. *Chief Subject of Study.*—After passing the preliminary examination every candidate shall announce which of the following departments he selects for his chief subject of study:

1. Mathematics: Including higher differential and integral calculus; differential equations; geometry (conics, higher plane curves, geometry of three dimensions); theory of functions, elliptic functions, analytical mechanics. In the final examination the candidate will also be tested with reference to his ability to make a computation with reasonable skill and accuracy. This will be necessary only where the candidate has had no satisfactory laboratory or observatory work.

2. Astronomy: Including either practical astronomy and theory of observations, or computation of orbits and ephemerides.

3. Physics.

4. Chemistry. A portion of the time will be required for the study of qualitative and quantitative chemistry, unless the candidate is already sufficiently proficient in these branches.

5. Mineralogy.

6. Geology and Physical Geography: Including either practical and engineering geology, with field work, or application of palæontology to determinations of formations, or physical geography.

7. Biology: Including the morphology, histology and embryology of some one class of animals or plants; physiology; histological methods and practice; animal embryology; modes of reproduction of plants.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length, and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time

appointed by the Committee on University Degrees and Fellowships. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Science carries with it that of Master of Science.

VII. *Fees.*—Those who apply for the degree shall pay the College Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Bachelor of Divinity. (B.D.)

This degree may be conferred upon a Bachelor of Arts of any approved college who shall also have completed a three years' course of theological study in any approved institution, followed by a two years' course of prescribed study in theology. This special course of study shall be prescribed, and all examinations required shall be conducted by examiners designated by the Board of Trustees.

The regulations as to preliminary examinations, chief and subsidiary subjects of study, thesis and final examination are similar to those pertaining to the doctorates, except that only one subsidiary subject is required. Residence in Princeton is not necessary for obtaining the degree.

The fees are the same as those paid by candidates for the Doctor's degree.

UNIVERSITY FELLOWSHIPS.

These fellowships were founded by subscription and endowment and were intended by the founders to encourage study and promote original research in the several departments to which they are assigned. They are distinguished from the college fellowships by being open to the graduates of any American college, while the appointments are made, not by competitive examination, but by a comparison of the records presented by the applicants as to their previous collegiate standing, capacity and character.

The University Fellowships are subject to the following regulations:

1. The Fellowships are to be held for one year, but in cases of special merit they may be continued for a longer period, by recommendation of the department and sanction of the Faculty.

2. The candidates shall be graduates of not more than five years' standing of an accredited American college. An application should be accompanied with evidence of the qualifications of the applicant to pursue an independent course of study and investigation in the department concerned.

3. Appointment shall be made by the Faculty upon recommendation of the professors in the department interested, and shall be announced at Commencement.

4. All applications must be in the hands of the Registrar of the College on or before May 15th, the appointees to hold their positions for a year from the following September.

It is deemed essential to the development of the University department that the number of these fellowships should be largely increased. The following have already been founded:

THE SOUTH EAST CLUB UNIVERSITY FELLOWSHIP IN SOCIAL SCIENCE.

This fellowship, which pays to the holder $500 per annum, was founded by alumni of the classes of '76, '77, '78 and '79—former residents of the South Entry of East College.

THE CLASS OF 1877 UNIVERSITY FELLOWSHIP IN BIOLOGY.

This fellowship pays to the holder $400 per annum.

THE UNIVERSITY FELLOWSHIP IN ENGLISH.

THE UNIVERSITY FELLOWSHIP IN ARCHÆOLOGY.

This fellowship pays to the holder $400 per annum.

COLLEGE FELLOWSHIPS, COMPETITIVE SCHOLARSHIPS AND PRIZES.

Besides the degrees and honors conferred in the regular course, annual fellowships, competitive scholarships and prizes are offered as special incentives to study, in the classes or departments with which they are connected.

Only matriculated students who are candidates for a degree are admitted to the competitition for these fellowships, prizes and scholarships, and no one is admitted to such competition who has failed to pass satisfactorily his last preceding examination in any of the departments.

No member of any class is allowed to compete for more than one of the fellowships or scholarships offered to that class.

The names of the college fellows, scholars and prizemen of each year are included in the Honor List for the year.

The funds for the college fellowships, prizes and competitive scholarships are special gifts, and the income is appropriated according to the specific instructions of the donor. They do not belong to the general funds of the College. If, therefore, there be default in the interest on the securities in which these funds are invested, the College assumes no pecuniary responsibility in the matter.

FELLOWSHIPS.

Every competitor must have been a member of the College in full standing for at least two academic years previous to the fellowship examinations.

No student whose final rank for scholarship is below the second general group can be a competitor for any fellowship; and no student can be a competitor for the fellowship in any particular department whose average rank for the last two years of his course is below the first group in that department.

Every Fellow obtaining one of the competitive fellowships the income of which is over $400 must devote his whole time for one year to study in the department for which the fellowship is provided, under the direction of the Professors in that department. He must reside in Princeton, and pass two rigid examinations on his work, unless by a vote of the Faculty he be allowed to study at an approved foreign university, in which case he shall from time to time furnish written reports of his work to the Professors in his department. The result of every examination and the reports of work done abroad shall be immediately reported to the Faculty. Any Fellow resident in Princeton shall, when called upon, perform such duties in the department to which he belongs as may be assigned to him by the President at the request of the Professors in that department. Any Fellow may be allowed to occupy free of cost in one of the College buildings a room assigned to him by the College authorities, and while occupying such room he shall be regarded as a resident officer of the College, and shall perform such duties in preserving order and decorum in the College edifices as the President and Dean may assign.

THE CHANCELLOR GREEN MENTAL SCIENCE FELLOWSHIP.

This fellowship, originally founded in 1870 upon the annual payment of $600 by the late Chancellor Henry W. Green, was permanently endowed in 1878 by a gift of $10,000 by his widow.

The income of this fund, at the current rate of interest, to be paid quarterly, will be awarded to that member of the Senior Class who shall write the best essay on a subject to be assigned by the department of philosophy, (to be given in on or before June 1), and who shall stand highest at a special examination to be held in June.

The examination will include the philosophies of Plato, Aristotle, Descartes, Locke, Leibnitz, Hume, Reid and Kant; also theoretical ethics, metaphysics, psychology and inductive logic.

THE CLASSICAL FELLOWSHIP.

The classical fellowship has been, for a time, without funds. The sum of $600, payable quarterly, was previously awarded to the successful competitor. A portion of that sum will be awarded to

that member of the Senior Class who shall stand highest at a special examination to be held in June, 1896, on the following subjects:

In Greek.

Translation from English into Greek. Translation of prose Greek at sight. The *Alcestis* of Euripides, Aristophanes's *Frogs*, Plato's *Charmides* and *Lysis*. The philosophy of Plato.

In Latin.

Translation from English into Latin. Translation of Latin at sight. Cicero *de Finibus*, and the relations of Roman philosophy to Roman religion as specially exhibited in the works of Cicero and Lucretius. History of Latin literature.

THE CLASS OF 1860 EXPERIMENTAL SCIENCE FELLOWSHIP.

This fellowship was founded in 1870 upon the sum of $10,000 subscribed by the Class of 1860. A deficiency of income, resulting from the depreciation of the value of the securities in which the principal was invested and the lowering of the rate of interest, is paid, by the consent of the donor, from the income of the Magee Professorship of Mining and Engineering, founded by George J. Magee, Esq., of the Class of 1860.

The sum of $600, to be paid quarterly, will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects, viz: 1. Theory of light. 2. (a) Palæontology of the Mammals. (b) Geology of the Cenozoic Era. 3. Outlines of theoretical chemistry.

THE J. S. K. MATHEMATICAL FELLOWSHIP.

The J. S. K. Fellowship was founded in 1873 upon the sum of $11,000 given by a gentleman in New York City, three-fourths of the income of which is devoted to this fellowship, and one-fourth to the Freshman First Honor prize.

This fellowship will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects: Geometry; the calculus; differential equations; the elements of the theory of functions.

THE BOUDINOT FELLOWSHIPS.

These fellowships are founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey.

THE HISTORICAL FELLOWSHIP.—The sum of $200 per annum, to be paid quarterly, will be given to the holder of the Fellowship, who shall be appointed by the Faculty, upon the nomination of the President and the Professor or Professors of History, for any period not exceeding three years, on condition that he reside in Princeton and devote his whole time to historical research; that he deliver such lectures and conduct such exercises as the President and the Professor or Professors of History shall direct, and that he perform such other duties as may be assigned him in accordance with the general regulations respecting the duties of resident Fellows.

THE MODERN LANGUAGE FELLOWSHIP.—The sum of $200, to be paid quarterly, will be awarded to that member of the Senior class who shall pass the best examination in June, on the following subjects:

In German—Translation from English into German; the reading at sight of German prose, scientific as well as literary; history of German literature; critical study of Lessing's Laocoon, Schiller's Jungfrau von Orleans, Goethe's Hermann und Dorothea and Faust. In French—Translation at sight of English into French; Brachet's Grammaire française; Demogeot's Histoire de la Littérature française; a critical knowledge of Molière's Tartuffe and Les Précieuses ridicules, Pascal's Pensées, premiére partie, Beaumarchais's Le Mariage de Figaro, Balzac's Eugénie Grandet. An essay of not less than four pages (foolscap) in either French or German.

The Fellow shall from time to time during the following year, as may be required by the Professors of Modern Languages, give evidence by papers that he is reading such a course as the Professors may approve.

THE E. M. BIOLOGICAL FELLOWSHIP.

The Biological fellowship will be awarded to that student who shall stand highest at a competitive examination on subjects assigned by the Professors of the Biological department.

The competition for this fellowship will be open to any member of the Senior class in either the Academic or Scientific department, or to any college graduate who shall have pursued during the pre-

ceding year, the university course in Biology at Princeton, and who shall, in the opinion of the examiners, be deemed competent to pursue the subject advantageously.

This fellowship conveys the use of a table in the National Seaside Laboratory at Woods Holl, Mass., together with all the facilities afforded for the collection and study of animal life during the season favorable for such investigations. In the winter months following this laboratory work the Fellow will pursue his studies at Princeton, and will be required to prepare and submit a thesis embodying the results of his summer researches.

The examinations for this fellowship in 1896 will be held in June upon the following subjects:

1. Life-history of higher cryptogams and gymnosperms.
2. Anatomy and embryology of mollusca.
3. Anatomy and embryology of the teleosts and selachians.
4. The histology of the nervous system.

PRIZES AND COMPETITIVE SCHOLARSHIPS.

ALEXANDER GUTHRIE M'COSH PRIZE.

The interest of $1,500 will be given annually to that member of the Senior class who shall pass the best examination and write the best essay in philosophy, including psychology, logic, metaphysics and the history of philosophy. The subject of the essay will be: The prevailing types of philosophy; can they reach reality logically? It must be handed in on or before June 1, 1896.

THE LYNDE PRIZES.

Three prizes—the income of $5,000, contributed by Charles R. Lynde, Esq.,—will be awarded by a committee appointed by the Faculty, to the three successful competitors in a debate on the Tuesday evening preceding Commencement. The competitors are six members of the Senior class—representatives of the Literary Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE BAIRD PRIZES.

Through the liberality of Charles O. Baird, Esq., the following prizes, representing the income of $6,000, will be given to-

those who excel in the oratorical exercises of the Senior class, viz: The Baird prize of $100, to the best speaker of those who have ranked among the first six writers in any two of the three departments of English Literature, Rhetoric and Oratory; a prize for oratory, of $50, to the best speaker, exclusive of the Baird Prizeman, of those who, in the same departments, have ranked among the first twelve writers; a prize for delivery, of $30, to the best speaker exclusive of the two just mentioned; also, a prize for poetry of $50; and two prizes of $40 and $30, respectively, for the best and the second best written disputations.

THE CLASS OF 1859 PRIZE.

The interest of $2,000 given by the Class of 1859, will be awarded to that member of the Senior class who shall write the *best* essay on The Literary Work of Oliver Wendell Holmes and pass the best examination on Shakespeare's Measure for Measure. The essay must be handed in on or before June 1, and the examination will be held in June. The subject for the essay for the Class of 1897 will be Mrs. Humphrey Ward as a novelist.

THE GEORGE POTTS BIBLE PRIZES.

The yearly interest of $1,000, given in 1867 by Mrs. Sarah A. Brown, expended in the purchase of two copies of Matthew Henry's Commentary on the Bible, will be presented to the two best Biblical scholars of the Senior class at the end of their College course.

THE LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.

This prize, being the annual interest on the sum of $1,000, contributed by the class of 1883, was instituted as a memorial of Rev. Lyman H. Atwater, D.D., LL.D., Professor of Political Science. It will be given to that member of the Senior class who *shall* be adjudged by the Professors of Political and Social Science to have passed the best examination and written the best essay. The subject for the examination in 1896 will be: The Referendum as used in Switzerland. The subject for the essay will be: Theories of Representation. The essay must be ready June 1, 1896; the examination will be held on that day.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

Mrs. Norman White has established in memory of her son, Frederick Barnard White of the Class of 1883, a prize in architecture, yielding $50 each year. It is open to the entire Junior and Senior classes and to Special students who take a full schedule of studies. It will be given for the best essay and examination. The subject of the essay for this year is: The Civic Buildings of Ancient Rome. The subject of the examination will be Roman architecture. The essay should be presented before June 1, 1896.

THE THEODORE CUYLER PRIZE IN ECONOMICS.

The interest of $1,000, presented by Mr. C. C. Cuyler, of the Class of 1879, will be given to that member of the Senior class who shall present the best thesis and pass the best examination in June on some subject in Political Economy, to be assigned by the Professor in charge of the Department of Political Economy. The subject for the thesis of 1896 will be: Bi-metallism, and the examination will cover the theory of value as outlined by Marshall.

CLASS OF 1869 PRIZE IN ETHICS.

The annual interest of $3,000, given by the Class of 1869, will be awarded to that member of the Senior class who shall pass the best examination in Ethics and write the best essay. The essay to be presented on or before June 1, 1896. The subject of the essay for the Class of 1896 will be: A criticism of the Ethics of Evolution.

THE C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

"The sum of one hundred and fifty dollars, payable in annual instalments of fifty dollars, will be awarded at intervals of not less than three years to that graduate of the College, pursuing the study of American history as a specialty, who shall have presented before graduation the best thesis on some topic assigned by the Professor of History, and connected with the political history of the United States between the years 1787 and 1820, and who shall annually, for two years thereafter, present as evidence of his work a satisfactory essay of not less than five thousand words on a kindred topic suggested by himself."

THE NEW YORK HERALD PRIZE.

The yearly interest of one thousand dollars, presented by Mr. James Gordon Bennett, will be given to the member of the Senior class or to the Special Student of satisfactory standing who shall have taken the prescribed course in Political Science and English Literature, and who shall have prepared the best essay in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States Government.

THE WOOD SCHOLARSHIP.

The sum of $150, the income of a legacy of Dr. George B. Wood, will be awarded to that member of the Junior class who shall stand highest for the Junior year.

JUNIOR ORATOR MEDALS.

Four gold medals, or books of equal value, will be awarded by a committee appointed by the Board of Trustees, to the four successful competitors in an oratorical contest on the Monday evening before Commencement. The competitors are eight members of the Junior class—four from the Cliosophic and four from the American Whig Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE MACLEAN PRIZE.

The Maclean prize, founded by the will of the late Henry A. Stinnecke, consisting of the sum of $100, will be given to that one of the orators chosen by the Literary Societies from the Junior class, who shall on the Monday evening before Commencement pronounce the best English oration.

The committee of judges will be composed of the Professor of Rhetoric and two graduates of the College appointed by the Board of Trustees.

DICKINSON PRIZE.

The Dickinson prize, founded by John Dickinson, Esq., of New Jersey, in 1782, consisting of a medal of the value of $60 (or its equivalent in money), will be awarded to that member of the Junior class who shall write the best dissertation upon a theme in

Logic. The dissertation to be presented on or before June 1, 1896. The subject of the dissertation may be learned by applying to the Professor of Mental Science and Logic.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.

This prize is to be given annually by the class of 1876 to the successful contestant in a debate on a subject of current interest in American politics, to be held on Washington's Birthday, said prize to be the interest of $1,000. The competitors, four in number, one from each class, are to be chosen by a vote of the respective classes.

THE CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Of the yearly interest of $1,500, one-half will be given to the best Old English scholar, and one-half, to the best English Literature scholar of the Junior Academic Class.

THE THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Junior Academic Class who shall pass the best examination in Chaucerian and Elizabethan English, and write the best thesis on some assigned topic in English philology.

THE STINNECKE SCHOLARSHIP.

The Stinnecke Foundation was established in 1870 by the will of the late Henry A. Stinnecke, of the Class of 1861, and was supplemented by a bequest received in 1876 from his aunt, Miss Maria Stinnecke. The income is divided between the Stinnecke scholarship of $500 and the Maclean prize of $100.

The Stinnecke scholarship, of the annual value of $500, tenable during the College course, unless forfeited by neglect of study, "will be given to that person who, having entered the Sophomore class, shall pass the best examination at the opening of the session in September, 1896, in the Odes of Horace, the Eclogues of Virgil, and the Latin Grammar and Prosody, as well as the Anabasis or Cyropædia of Xenophon and the Greek Grammar." Students of the College who have been members of the Freshman class, as

well as new students entering the Sophomore class, will be admitted to such examination. The committee of examiners is appointed by the Board of Trustees.

THE CLASS OF 1861 PRIZE.

The interest of $1,200, given by the Class of 1861, will be awarded to that member of the Sophomore class who shall pass the best examination at the end of the year on Mathematics 5, 6, 7, 8.

THE FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

This prize, the yearly interest of $500, will be given to that member of the Sophomore class, not below the fourth group in his English studies, who in the judgment of a committee appointed by the Faculty, shall write the best English essay of the year.

THE CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Sophomore Academic class who, at the close of the Sophomore year, shall pass the best examination on the English studies of the year.

THE FRESHMAN FIRST HONOR PRIZE.

A prize of $200, part of the income of the J. S. K. Fund, to be paid in quarterly instalments during the following year, will be awarded to that member of the Freshman class who, having entered said class at the beginning of the College year, shall, at the end of the year, be reported to the Trustees by the Faculty as having attained the "highest average grade" in scholarship, provided he pursue his studies in this College and maintain a good standing during the Sophomore year. No student who has been suspended from College, or who has been put upon his last probation, shall be eligible to this prize.

SOCIETIES.

Literary Societies.

The Cliosophic and American Whig Societies originated early in the history of the College. They are conducted by the undergraduates, but also include in their organization graduates and officers of the College. Both possess valuable libraries of over 10,000 volumes each. The old halls in which they were accustomed to meet, becoming too small for their accommodation, have been removed, and new and more commodious buildings have been erected near the old sites. They both pursue courses of literary exercises, award numerous prizes for orations, essays and debates, and grant diplomas to their respective graduates.

A generous competition for College honors has always prevailed between them. On the evening before Commencement representatives of the Societies from the Senior class engage in a public debate —on the preceding evening representatives from the Junior class engage in a competition in oratory. The details respecting the Lynde debate and Junior orations will be found on pp. 126, 129.

The Philadelphian Society.

The Philadelphian Society is an association of undergraduates for the promotion of the religious interests of the College, particularly of the members of the Society. It was founded in 1825. Devotional meetings, usually conducted by members of the Faculty, are held on Thursday evenings, business meetings on Saturday evenings. Murray Hall, the building belonging to the Society, was erected from a bequest left for the purpose by Hamilton Murray of the class of 1872. It contains a hall for public worship and a reading room supplied with religious books and periodicals.

The St. Paul's Society.

The St. Paul's Society, which was founded in 1875, is an association similar in nature and aim to the Philadelphian, and is intended to be helpful, devotionally and practically, to those students in the College who have been accustomed to the worship of the Protestant Episcopal Church. It has weekly meetings, conducted by the students, and ordinarily a course of sermons is delivered annually in Trinity Church under its auspices. The weekly devotional meeting is held on Sunday evening at half past seven o'clock, and its business meetings on the third Wednesday of November, and the fourth Wednesday of April.

BUILDINGS, LABORATORIES, COLLECTIONS.

The College buildings are situated in an elevated and conspicuous portion of the campus, which consists of about two hundred and twenty-five acres. The oldest, and in many respects the most interesting of the buildings, is Nassau Hall, which dates back nearly to the foundation of the College, having been erected in 1756. A portion of the west wing is still occupied by students, the remainder being devoted to the histological laboratory, the laboratory of experimental psychology and the offices of the Curator of the E. M. Museum and of instructors in the department of biology. The central and eastern portions contain the geological museums and lecture room, and the palæontological laboratory. The School of Science building, the Chancellor Green Library, Dickinson Hall, Murray Hall, and a number of other buildings, including the majority of the dormitories, have been erected since 1870. The Marquand Chapel, the gift of Henry G. Marquand, Esq., of New York, was built in 1882. The Academic lectures and recitations are conducted mainly in Dickinson Hall and in the east end of Nassau Hall, while the Scientific lecture rooms and laboratories are at present principally in the building of the John C. Green School of Science and in the Biological laboratory presented by the class of 1877. The Museum of Historic Art, the central part of which has been completed, will contain the lecture rooms for the courses in Art and Archæology. The special instruction in the department of Electrical Engineering is carried on mainly in the Magnetic Observatory, and the new Chemical Laboratory provides the class rooms and laboratories of the departments of Chemistry and Mineralogy. Two new dormitories, the Albert B. Dod Hall, and the David Brown Hall, both gifts of Mrs. David Brown, of Princeton, have been recently erected. Other new

buildings are the Dynamo building of the School of Electrical Engineering and the Halls of the American Whig and the Cliosophic Literary Societies. Alexander Hall is a handsome building lately finished, the generous gift of Mrs. Charles B. Alexander, to be used for Commencement exercises and all academic gatherings. The Isabella McCosh Infirmary has been completed and is now open. The Brokaw Memorial Building, in connection with the Brokaw Field, is being constructed. This building is the gift of Mr. I. V. Brokaw, in memory of his son, Frederick Brokaw. A building to be used for indoor tennis, and for occasional entertainments, has been erected by contributions from the undergraduates and their friends. The students—except by special permission of the Faculty —reside in the College dormitories, the west wing of Nassau Hall, East College, West College, Reunion Hall, Witherspoon Hall, Edwards Hall, University Hall, Albert B. Dod Hall, and David Brown Hall.

LIBRARIES.

The Chancellor Green Library.

Organisation: Ernest C. Richardson, Librarian; Miss C. Martins, 1st Assistant, in charge of Reference and New Book Departments; Miss C. B. Joline, Chief Cataloguer; V. L. Collins, Classification; Miss S. A. Vinton, Periodicals; R. H. Peabody, Accessions; Miss E. G. Hyde, Delivery Clerk; Miss Mershon, Mr. Cottrell, Miss Hill.

The College library began with the College itself, in a bequest of books by Governor Belcher. The first catalogue, printed in 1760, shows that it then consisted of more than twelve hundred volumes. It suffered much during the Revolution, and it was burnt, with Nassau Hall, in 1802. The gifts of many liberal friends soon re-established it, and it slowly advanced to 9,313 volumes in 1854. The want of resources for its increase kept it small, until the Elizabeth fund of $50,000 was created by Mr. John C. Green in 1868. When the present library building was erected by him, in 1872–73, the collection contained about 25,000 volumes. The library at present contains 97,069 volumes, and perhaps 25,000 unbound periodicals and pamphlets. It is broadly divided into the

Main Library, the Alumni collection, the Civil War collection, the Princeton College collection or "Archives," the Kept books, and the Periodical collection. It is probably strongest in the departments of mathematical, physical, natural and mental science, but it is rich, also, in philology and literature, especially in works on the origin and early history of the English language. Generous efforts have been made to enrich it with the serial issues of scientific associations abroad.

The library building contains a large central room with alcoves, a large room to the west used for the meetings of Trustees, but at other times serving as a general Reading Room, three small rooms at the east end used chiefly for administrative purposes, and basement. The bulk of the main library is in the large room, and the remainder—about 15,000 of the less used volumes—in the basement. The current Periodicals are kept on file in the West room.

The Library hours are, during term time, from 8 A. M. until dark; in vacation from 9 A. M. until 1 P. M.

Books may be drawn by all officers and students of the College and Theological Seminary, and by others having special permission. The number of books which may be taken is limited to three in the case of students, with the exception of Seniors, who may take five. Officers, Fellows and Graduate students may take any reasonable number. The length of time during which books may be kept is two weeks. Fellows and Graduate students may retain for four weeks, and Officers for any reasonable time. All books may be renewed when due, unless they have been asked for by some one else. Reference books (including books temporarily withdrawn from general circulation for debates, essays, or similar purposes) may be taken over night, *i. e.*, between 4 P. M. and 8:30 A. M.

The catalogues consist of a printed subject catalogue, extending to 1884, a written author card-catalogue in two alphabets, a card-catalogue of subjects, and a special printed card-catalogue of the Class of '83 library. These are found on the catalogue desks, on the southeast side of the main room.

The Hall Libraries.

The two Literary Societies—Whig and Cliosophic—have catalogued libraries of 10,000 volumes or more each, and the religious society, the Philadelphian, one of 800 volumes.

The Theological Seminary Library.

The library of the Princeton Theological Seminary, which contains 57,000 volumes, is open to the students of the College for consultation and loan of books on Monday from 12 M. to 1 P. M. and from 2 P. M. to 4 P. M., on Tuesday, Wednesday, Thursday and Friday from 10 A. M. to 1 P. M. and from 2 to 4 P. M., and on Saturday from 10 A. M. to 1 P. M.

SUMMARY OF LIBRARIES.

The Chancellor Green Library,	97,069
Hall Libraries,	21,000
Seminary Library,	57,000
Total (exclusive of pamphlets and duplicates),	175,069

MUSEUMS.

The E. M. Museum of Geology and Archæology.

This Museum, occupying the central and eastern wings of Nassau Hall, contains collections which are distributed in the three general departments of Geology (including Mineralogy), Palæontology and Archæology. Their arrangement is especially adapted to the purposes of comparative study.

In the GEOLOGICAL DEPARTMENT a special room contains a unique collection of over 5,000 specimens of erratic boulders and drift materials from Switzerland. There is also a special room devoted to the typical rocks and fossils of the State of New Jersey. A collection of the typical rocks of the State of New York represents the series as described in the Geological Survey of that State.

There is in this department a large collection of minerals, chiefly crystals, containing about 2,600 specimens, bequeathed to the College by the late Archibald MacMartin, of New York. The perfection of the specimens, and the number of localities represented in each family, make this collection one of special value.

PALÆONTOLOGICAL DEPARTMENT.—The upper or eastern hall contains the main collection; on the platform are the skeletons of a Mastodon, an Irish Deer, a Cave Bear, and some of the extinct birds of New Zealand; also the skulls of Uintatherium and a remarkably complete skeleton of Cervalces. There are mounted

casts of the gigantic reptiles and mammals of the secondary, tertiary and quaternary ages. Surrounding the room is a very perfect collection of vertebrate and invertebrate fossils from Europe and America, illustrating the principal organic forms of all the geological epochs. The typical fossils selected agree, as far as possible, with those mentioned in Dana's Geology, as characteristic of different geological periods. Included in this series are the fine eocene and miocene fossils, many of which are type specimens, procured in the West by the various Princeton collecting parties. There is also a series of fossil insects and plants from Colorado, most of which are also types. Altogether the number of fossils, not counting duplicates, is 15,000.

ARCHÆOLOGICAL DEPARTMENT.—Here are relics of the Swiss lake dwellings, and numerous implements of stone and bronze from Denmark; also several hundred flint instruments from most of the classical localities of the palæolithic and neolithic ages of France.

America is represented by the pottery and human remains of the mound builders, by several hundred specimens of Mexican and Peruvian pottery, and by a number of recent Indian relics. The interesting ethnological collection of objects, chiefly from Alaska and New Mexico, which Dr. Sheldon Jackson presented to the Theological Seminary of Princeton, has been transferred to this Museum by the Trustees of that institution, with the consent of the donor. There is also a series of models of the cliff-dwellings and Pueblos of the Southwest, executed under the direction of Dr. Hayden.

Below the eastern hall are the lecture and working rooms.

Museum of Biology.

The biological collections have been chiefly made from the endowment fund of the John C. Green School of Science. There have also been many smaller donations to the Museum from time to time. The collections are placed in the large upper hall of the School of Science building, and are at present especially rich in osteological specimens. On the same floor are the laboratory and working rooms of the Curator of the Museum. The collection of vertebrates includes a large number of mounted and disarticulated skeletons of mammals, reptiles, birds and fishes, a series of the birds

of New Jersey and of other districts of North America, carefully mounted, and alcoholic specimens. A feature of the ornithological collection is the very large number of unmounted bird skins, arranged for the purpose of comparative study of the plumage, beak and feet. Among the invertebrates are a series of ascidians, echinoderms, molluscs, crustaceans, insects, worms, corals, sponges, and microscopic preparations of small forms. Students may apply to the Curator for access to the catalogue and cases containing the skeletons. The Museum has received a very fine specimen of Tarpon, captured by J. Boyd Nixon, '67, and by him presented to the College.

The Herbarium is on the second floor of the School of Science building, and is arranged as a museum of the botanical collections, also as a working laboratory for students. The plants are classified according to Bentham and Hooker's *Genera Plantarum*, and include specimens from the different sections of the United States, and from South America, Europe and Australia. There are extra specimens for laboratory use and dissecting, together with compound microscopes, reagents, anatomical instruments, section cutters, models, diagrams and books of reference; and the reference library of the late Professor Leo Lesquereux, presented to the College by Mr. P. W. Huntington of Columbus, Ohio.

During the past year the Herbarium has received gifts of plants from Oregon, Wyoming, Hawaii and Greenland, donated by Francis E. Lloyd, '91, Mr. J. B. Hatcher, Mr. E. B. Baldwin, and Henry G. Bryant, '83. The Museum has received some corals from Bermuda through Rev. Dr. J. S. MacIntosh, Crinoids from Baffin's Bay through Prof. W. B. Libbey; and its Osteological Collection has received accessions by purchase. The Fellows in Biology have inaugurated a local collection of our Fishes, Reptiles, and Amphibians, and the Entomological Collection has been improved and arranged by R. C. Paulmier, '94.

The Museum of Historic Art.

The upper story of the new museum has been sufficiently finished to serve the purpose of exhibition. Mrs. T. Harrison Garrett has kindly arranged for a series of exhibitions of her fine collection of prints. About eight hundred engravings have been put on exhibition in 418 frames.

ments which are serviceable not only in the lecture courses but in the practical laboratory work. The collection contains most of the standards and instruments of precision that are needed by the advanced student or investigator. The shop connected with the School of Science is at the service of the department of physics and apparatus needed for special researches may be constructed there.

Buildings and Apparatus of the School of Electrical Engineering.

The magnetic observatory is a brick building without iron in its construction, situated on Washington street, in a position in which it is, as far as possible, free from the disturbing influences of large masses of iron. The main laboratory is in the basement. On the first floor are a reading room and a private laboratory, and on the second floor is a large room, which is used for special investigations. Among the instruments in the laboratory which deserve special mention are: a large physical balance, Thomson's quadrant electrometer, Thomson's electrostatic electrometer, specially constructed galvanometers by Edelmann, Hartmann, and Elliott, Thomson's ampere balances, two large resistance boxes, adjusted by Anthony. Besides these, there is a full outfit of galvanometers, voltmeters, ammeters and all other instruments needed either in technical work or in exact investigation.

The dynamo building stands on the corner of Washington and William streets. It is connected with the School of Science building. The motive power for the machinery is furnished by a sixty horse-power boiler and a Ball engine. The dynamo plant, at present, consists of a Westinghouse alternate current machine with full set of transformers, a Mather, an Edison, a Brush arc, an Eickemeyer, a Gramme, a machine constructed in the workshop of the School of Science, Brush and Eickemeyer motors. With these machines is a complete outfit of accessories, and a large rheostat of German silver used in testing the machines and for measurements. Arc and incandescent lights are so arranged that the various systems of distribution may be studied.

The dynamo building is connected with the magnetic observatory by heavy copper wires, so that the instruments of the observatory are available for experimental work with the dynamos. Four sets of storage batteries are also connected with the plant.

Chemical Laboratories.

The laboratory and cabinets of the department of General Chemistry are fully equipped for the illustration of the courses in the two branches of general and applied chemistry.

The entire department of Analytical Chemistry and Mineralogy has been transferred to the new chemical laboratory, which is an admirably lighted and ventilated fire-proof building, the main portion of which is 108 feet long and 58 feet wide, with a wing 47 feet long and 42 feet wide. It has been planned and equipped after a careful study of many of the best laboratories at home and abroad. The top floor is entirely devoted to laboratories for students in the undergraduate courses, with private rooms for the professor and assistants, weighing room, reading room and sulphuretted hydrogen room. Each student has a separate desk, provided with water, gas, suction for filter-pump, and sink.

In the second floor are two large lecture rooms, a room for experiments in chemical physics, two cabinets for specimens and lecture apparatus, a mineral cabinet, a laboratory for advanced students and the professor's private laboratory.

In the basement are various rooms for gasometric work, and for experiments in technical and organic chemistry, which cannot conveniently be undertaken in the laboratories for general students, assay laboratory, work-shop, cloak room, janitor's room, store-rooms and battery.

Mineralogical Collections of the School of Science.

There are three cabinets of minerals. The principal one contains over five thousand specimens, embracing nearly every mineral species. Two smaller cabinets, one with labeled and the other with unlabeled minerals, are provided for practice with the classes, and to these two cabinets the students have free access.

There is also a collection of 240 specimens of typical rocks; together with a large number of Fuess's rock sections, as well as sections from other sources, for the study of lithology.

The department is provided also with section cutters, grinding lathes, and other appliances for the special study of minerals and rocks; including a complete Groth's polarizing apparatus with goniometer, a large Babinet goniometer, Norremberg's polarizing apparatus, Rosenbusch's microscope, and minor apparatus.

Histological Laboratory.

This laboratory is situated on the upper floor of the west wing of Nassau Hall. It is fitted to accommodate twenty-two students at a time, each of whom is provided with the requisite instruments, reagents and staining fluids for the study of the various tissues. The microscopes have been selected with a view to convenience in practical work. A large private collection of slides, illustrating the general subject of histology, is also placed at the disposal of the students, as well as books of reference and American and foreign publications. The laboratory is open at all hours to its regular students.

The Class of 1877 Biological Laboratory.

This building is situated at the east end of Dickinson Hall. It was presented to the College by the Alumni of the Class of 1877 at their decennial reunion. It is designed for the advanced practical and experimental courses in comparative anatomy, embryology, and physiological psychology. The main morphological laboratory, upon the second floor, is equipped for the instruction of undergraduate students, with a private room and special library of reference books adjoining. The first floor comprises the embryological laboratory, intended for the use of University students engaged in research, and is in charge of the Class of 1877 Fellow in Biology; also the bacteriological laboratory for instruction and experimental work in bacteriology. The basement is designed for aquaria. The laboratory is open to students during the day from 8 A. M. to 6 P. M., and in the evening, subject to special regulations.

The Palæontological Laboratory.

This laboratory has been fitted up in Nassau Hall to provide for practical instruction in the courses in palæontology. Each student has a table with drawers, etc., for his own use, where the study of fossil forms can be conveniently carried on. The very extensive collections of the geological museum furnish ample material for the general course in palæontology, stratigraphy, as well as for the purposes of research. A series of diagrams, maps and models is provided, as are also microscopes and prepared slides for the examination of the minute structure of various extinct forms, both animal and vegetable.

For advanced students engaged in original investigations, there are private rooms available.

Civil Engineering Laboratory and Apparatus.

The laboratory is used in connection with the instruction in Experimental Mechanics and the Planning and Construction of Engineering Works, and contains a torsional testing machine; a wire and cement tester; various kinds of current meters and water gauges; a Worthington water meter; a contrivance for determining the hydraulic slopes within earthen retaining banks; a flushing tank; a reaction wheel and other minor pieces of hydraulic apparatus; a double acting steam pump; a locomotive link and valve motion; a ten horse-power compound engine with condenser, indicators, gauges and a Prony brake; and a 25-foot iron working model of a single track railroad bridge, with a complete outfit of false-works and other appliances for its erection, designed especially for this College.

The illustrative apparatus of the laboratory comprises rail sections and joints; specimens of the products of iron and steel mills and other building materials; a Sturtevant blower; models of water wheels, of trestles, of the details of iron bridge and roof joints, and of vaults and arches. A collection of lantern slides, especially selected for use in the class room, has been provided and includes a large number of views, in detail, of the East River suspension bridge at different stages of its progress.

The instruments provided for the course in Geodesy represent the work of twelve different firms of high repute, care being taken to avoid the duplication of instruments by the same maker, and includes a twelve-inch geodetic transit, a large plane-table with telescopic alidade and a telemeter; engineer's mining and solar transits; wye and dumpy levels; surveyor's compasses; mercurial and aneroid barometers; sextants; heliotropes; various forms of linear measures, and a large assortment of reconnoitring instruments.

ASTRONOMICAL OBSERVATORIES.

The Halsted Observatory.

This is appropriated to scientific work, chiefly in the department of astronomical physics. The building is of stone, with an iron dome thirty-nine feet in diameter, the power for moving it

and its sliding shutter being furnished by an electric motor and storage battery. The principal instrument is the great equatorial, of twenty-three inches aperture and thirty feet focal length, made by the Clarks. It is provided with all the usual accessories, the outfit being rendered especially complete by the recent gift of a spectroscope of the highest power, fitted for both visual and photographic work. The building also contains a clock and a chronograph, and is in electric connection with the Observatory of Instruction.

The Observatory of Instruction.

This establishment is devoted entirely to the use of students, and is fully equipped for its purpose. It possesses an equatorial (by Clark) of 9½ inches aperture, with a full complement of spectroscopic and other accessories. It has also a 9-inch reflector; a meridian circle with circles 2 feet in diameter and a 4-inch telescope; two transit instruments with 8-inch telescopes, both of them arranged for use as zenith telescopes; a 3-inch prime-vertical instrument; a chronograph; two standard clocks, and two chronometers. There are also a number of sextants, and all the other subsidiary apparatus required for carrying out the work involved in the courses on Practical Astronomy. See Astronomy 5, 6.

THE ISABELLA M'COSH INFIRMARY.

The Infirmary was planned by Surgeon-General Billings, and contains all the modern arrangements of the best hospital construction. The building is pleasantly located on Washington street, commanding every advantage of position as to air, outlook and sewerage. While the health of Princeton is exceptionally good, the occasional illness incident to so large a body of students demanded accommodation suitable for its care. This has been secured in the Infirmary by the liberality of friends of the college.

It has been furnished and is under the care of Mrs. Therese B. Hill as matron, open to the reception of students on certificate of attending physician.

ALEXANDER HALL.

This handsome and substantial building is the generous gift of Mrs. Charles B. Alexander and is named in honor of her husband's distinguished ancestors. The building has been founded for Commencement and Class Day exercises, public lectures, and other university gatherings of a general character. As an auditorium it is admirably arranged with sloping floor and high gallery, enabling an audience of fifteen hundred to be comparatively near the speakers. A marked feature of the internal decoration is the polychromatic mosaic and marble finish of the rostrum and of the baldachino, which serves as a President's throne. The beauty of the interior will be even more effective when the mosaic wall pictures behind the rostrum shall have been put in place.

Externally, the building presents a massive appearance, being constructed of granite and brown stone in the Romanesque style of western France. The front of Alexander Hall toward the south exhibits a large rose window beneath a gable roof, and between the central structure and two side towers are two fine round-arched openings which lead into a wide ambulatory encircling the building. From this ambulatory the rostrum and auditorium are reached. The two side towers and two smaller ones at the rear enclose staircases, which lead to the auditorium gallery. The building, which has been designed by William A. Potter, is being decorated with sculpture under the direction of J. Massey Rhind. Beneath the rose window is a seated figure of Learning, on one side of which are allegorical figures of Architecture, Sculpture, Painting, Poetry, Music, and Belles Lettres, on the other are Oratory, Theology, Law, History, Philosophy, and Ethics. Other sculptures about the rose window and in the niches around the ambulatory are being added.

GYMNASIUM.

The gymnasium was built in 1869 by Mr. Robert Bonner and Mr. Henry G. Marquand. It contains, besides the main hall with the apparatus for physical training, hot and cold shower and plunge baths, dressing rooms, bowling alleys, and a gallery for visitors. The gymnasium is open daily from 10 A. M. to 7 P. M. throughout the year. The director is in attendance during these hours to examine, advise, and instruct all who may desire his services.

THE UNIVERSITY ATHLETIC GROUNDS.

This field is a spacious one, complete in its appointments and less than a quarter of a mile from the College. There is room on the turfed portion for two games simultaneously of either baseball or football. The cinder track is about half a mile long, with carefully calculated curves. Within the enclosure are: 1. A large winter practice house, built of brick, with a clear floor space of 60 by 140 feet; 2. A club house containing the necessary dressing rooms; 3. A large and handsome grand stand, the gift of Mrs. J. J. McCook of New York, which has a seating capacity of 750 and a tower clock in one of its gables. On the field is likewise the Osborn club house, the gift of Professor Henry Fairfield Osborn, of the class of '77, in which are the necessary bath rooms, training tables, etc., for the use of the athletic teams.

GENERAL COLLEGE ORDERS.

TERMS AND VACATIONS.

The year is divided into two terms of eighteen weeks each. (See Calendar, pp. 5, 6.)

The first term of the present College year (1895–96) began on Wednesday, the 18th of September, 1895, and ends on Wednesday, the 5th of February, 1896. The second term begins on Thursday, the 6th of February, 1896, and ends on Wednesday, the 10th of June, 1896, the day of the Annual Commencement.

Students are not allowed to leave College during term-time without express permission obtained from the Faculty or from the officer of the class to which they belong.

REGULATIONS CONCERNING REGISTRATION.

At the beginning of the College year each undergraduate student shall report in person at the Registrar's Office, before 1 P. M. of the first Thursday of the term, and register

a. his full name, home address and College address—

b. his choice of electives for the term.

Entering students shall register when they matriculate.

After the Thanksgiving recess, the Christmas vacation, and the Easter recess, the student shall report in person at the Registrar's Office, before 5 P. M. of the day on which exercises are resumed, and register his name.

The choice of electives for the second term must be reported in writing to the Registrar, on or before the third Monday in January.

The student who does not register in accordance with the above rules will not be allowed to register until he has received special permission from his class officer.

In every case of delay in registration the student's gratuity shall be reduced by *three* for each day that the registration is delayed. Serious cases shall be punished by postponement of the registration with corresponding reduction of the gratuity, by putting the student on probation, by suspension, or otherwise as the Faculty may determine. The penalty for delay in reporting the full list of electives for the term shall be the reduction of the gratuity by one each day for each elective not reported, until the list is complete; this delay to be reckoned from the registration at the beginning of the College year or from the third Monday in January. Serious cases shall be punished more severely as the Faculty may determine. If the student enter any elective class after exercises with that class have been held, he shall be reported by the instructor as absent from those exercises.

COMMENCEMENT EXERCISES.

THE ANNUAL COMMENCEMENT takes place on the Wednesday preceding the last Wednesday but one in June.

THE BACCALAUREATE SERMON of the President to the graduating class is delivered in the College Chapel on the Sunday preceding Commencement.

The Class Day exercises of the graduating class, and the Junior oratorical contest are held on Monday preceding Commencement. The reading of theses by the graduating class of the School of Science, the annual meetings of the Literary Societies, the annual meeting of the Alumni Association of Nassau Hall, and the Lynde prize debate are held on Tuesday.

PUBLIC WORSHIP.

Prayers are offered in the Marquand chapel every week-day morning.

Divine service, under the superintendence of the President, is held in the Marquand chapel, on Sunday, at 11 o'clock A. M. The service is conducted by the President, the Dean, the clerical members of the Faculty, together with occasional sermons from eminent divines from out of town.

Religious services are held in the chapel every Sunday afternoon at 5 o'clock.

Permission to attend divine service elsewhere than in the chapel, on special occasions, is granted on application to the President. For permission to attend regularly one of the churches of the town on Sunday morning, a written request from the parent or guardian of the applicant must be presented to the President.

PUBLIC LECTURES.

The interest of $10,000, presented by Mr. Spencer Trask of New York City, is available to secure the services of eminent lecturers to deliver public lectures before the College on subjects of special interest.

ATTENDANCE UPON COLLEGE STUDIES.

The several classes ordinarily attend three recitations or lectures every day, except Wednesday and Saturday, upon which days there are no College exercises in the afternoon.

Every undergraduate student is required to attend all College exercises in the chapel, to be present during the lectures and recitations of his class, and is expected to avail himself of the privileges of the library and gymnasium upon the conditions and at the hours appointed.

Each student is allowed a certain limited number of absences from chapel and recitations during each quarter. When a student's absences exceed this gratuity they are charged against his gratuity for the next quarter, or otherwise dealt with by such discipline as the Faculty may direct.

CHARITABLE FUNDS.

THE RICHARDS FUND.—A bequest by Mrs. Esther Richards, of New York, amounting to $2,970.82, for the benefit of candidates for the ministry. Received in 1790.

THE LESLIE FUND.—A bequest of James Leslie, of New York, a graduate of the class of 1759, amounting to $10,677.49, for "the education of poor and pious youth with a view to the ministry of the Gospel in the Presbyterian Church." Received in 1792.

THE HODGE FUND.—A bequest of Hugh Hodge, of Philadelphia, of a house and lot on Market street, above Second (No. 205), "to be held by the Trustees in trust, to lease out from time to time,

and the rents to be applied to the support and education of pious youth for the ministry." Received in 1805. The net income for the current year will amount to about $750.

THE VANARSDALE FUND.—A bequest of Robert VanArsdale, of Newark, N. J., of the class of 1826, amounting to $3,000, "in trust for promoting charitable instruction in the College of New Jersey, according to the discretion of the Faculty." Received in 1875.

ENDOWED SCHOLARSHIPS.

1–3.	The COLT Scholarships, founded by Roswell Colt, of Paterson, N. J.,	$3000
4.	The NEWKIRK Scholarship, founded by Matthew Newkirk, of Philadelphia,	1000
5.	The JOHN JOSEPH RANKIN Memorial Scholarship, founded by his father, Wm. Rankin, of Newark, N. J.,	1000
6.	The CRESSWELL Scholarship, founded by A. Cresswell of Kishacoquillas, Pa.,	1000
7.	The ISAAC R. RANKIN Scholarship, founded by Isaac R. Rankin, of Newark, N. J.,	1000
8.	The MUSGRAVE Scholarship, founded by Rev. George W. Musgrave, D.D.,	1000
9.	The COGSWELL Scholarship, founded by Rev. Jonathan Cogswell, D.D.,	1000
10.	The GREEN Scholarship, founded by Hon. Henry W. Green, LL.D.,	1000
11–15.	The LENOX Scholarships, founded by James Lenox, of New York,	5000
16.	The HODGE Scholarship, founded by Dr. Hugh L. Hodge, of Philadelphia,	1000
17.	The A. B. BAYLISS Scholarship, founded by A. B. Bayliss, of Brooklyn,	1000
18.	The HENRY J. VAN DYKE Scholarship, founded by George L. Sampson, of Brooklyn,	1000
19.	The GREGORY Scholarship, founded by Dudley S. Gregory, of Jersey City,	1000
20.	The FIRST PRESBYTERIAN CHURCH OF PEEKSKILL Scholarship, founded by members of the Church,	1000
21.	The VAN VORST Scholarship, founded by Hon. John Van Vorst, of Jersey City,	1000
22.	The JANEWAY Scholarship, founded by the Rev. Jacob J. Janeway, D.D.,	1000
23.	The PRESBYTERIAN CHURCH OF HUNTINGTON, L. I., Scholarship, founded by the ladies of the Church,	1000

24. The BACKUS Scholarship,
founded by E. F. Backus, of Philadelphia, 1000
25. The VAN SINDEREN Memorial Scholarship,
founded by Mrs. and Miss Van Sinderen, of Brooklyn, 1000
26. The NORRIS HALSTED Scholarship,
founded by Gen. N. Norris Halsted, of Newark, N. J., 1000
27. The MACLEAN Scholarship,
founded by Drs. John and George M. Maclean, 1000
28. The HAINES Scholarship,
founded by Richard T. Haines, of Elizabeth, N. J., 1000
29. The JACKSON Scholarship,
founded by Hon. John P. Jackson, of Newark, N. J., 1000
30. The TUTTLE Scholarship,
founded by Joseph N. Tuttle, of Newark, N. J., 1000
31. The GERTRUDE N. WOODHULL Memorial Scholarship,
founded by her son, Dr. John N. Woodhull, of Princeton, 1000
32. The NATHANIEL W. TOWNSEND Memorial Scholarship,
founded by his daughter, Mrs. Daniel Haines, 1000
33. The FIRST PRESBYTERIAN CHURCH OF BRIDGETON
Scholarship, founded by members of the Church, 1000
34. The SKIDMORE Scholarship,
founded by Joseph P. Skidmore, of New York, 1000
35. The SPENCER Scholarship,
founded by L. S. Spencer, 1000
36. The JEREMIAH D. LALOR Memorial Scholarship,
founded by a friend, 1000
37. The MARQUAND Scholarship,
founded by Frederick Marquand, of Southport, Conn., 1000
38. The FIRST PRESBYTERIAN CHURCH OF TRENTON
Scholarship, founded by members of the Church, 1000
39. The CAMERON Scholarship,
founded by Hons. Simon and Donald Cameron, 1000
40. The SECOND PRESBYTERIAN CHURCH OF ELIZABETH
Scholarship, founded by members of the Church, 1000
41. The C. S. BAYLISS Scholarship,
founded by Charles S. Bayliss, of Brooklyn, 1000
42. The ELIZA MUSGRAVE GIGER Memorial Scholarship,
founded by her son, Prof. George M. Giger, D.D., 1000
43. The BLAIR Scholarship,
founded by James Blair, of Scranton, Pa., 1000
44. The PENNINGTON Scholarship,
founded by Dr. Samuel H. Pennington, of Newark, N. J., 1000
45. The FENTON Scholarship,
founded by Aaron Fenton, 1000
46. The TRASK Scholarship,
founded by Alanson Trask, of Brooklyn, 1000
47. The WITHINGTON Scholarship,
founded by Chandler Withington, of Kingston, N. J., 1000

48. The NEWARK Scholarship,
founded by the will of Henry Rogers, of Newark, N. J., 1000
49. The CARTER Scholarship,
founded by Aaron Carter, of Newark, N. J., 1000
50–54. The HOLMES Scholarships,
founded by Capt. Silas Holmes, of New York, 5000
55. The COLWELL Scholarship,
founded by Stephen Colwell, of Philadelphia, 1000
56. The AITKIN Scholarship,
founded by John Aitken, of New York, 1000
57. The BULLARD Scholarship,
founded by Mrs. P. Bullard, 1000
58. The CHARLES DICKINSON HAMILL Memorial Scholarship, founded by his father, the Rev. Samuel M. Hamill, D.D., 1000
59. The CYRENIUS BEERS Memorial Scholarship,
founded by his daughter, Miss Julia Beers, 1000
60. The JACOBUS Scholarship,
founded by Peter Jacobus, of Newark, N. J., 1000
61. The MATTHEW B. HOPE Scholarship,
founded by the Trustees as an acknowledgment of the services of Prof. Hope in raising an endowment of over $100,000, 1000
62. The JOHN MACLEAN Scholarship,
founded by a friend of President Maclean, 1000
63. The WHITE Scholarship,
founded by William White, Esq., 1000
64. The ELIZABETH VAN CLEVE Scholarship,
founded by the Hon. C. S. Green, of Trenton, N. J., 2000
65. The BLOOMFIELD Scholarship,
founded by the Hon. Amzi Dodd, of Bloomfield, N. J., 1000
66. The FLAGLER Scholarship Fund,
the gift of Henry M. Flagler, of New York City, 1500
67. The JAMES MCCOSH Scholarship,
founded by friends of President McCosh in N. Y. City, 1000
68–69. The WISTAR MORRIS WOOD and CHARLES MORRIS WOOD Scholarships, founded by their father, the Rev. Charles Wood, D.D., of Germantown, Pa., 2000
70. The CLASS OF 1856 Scholarship,
founded by members of the Class of 1856, 1000
71. The CLASS OF 1841 Scholarship,
founded by members of the Class of 1841, 1000
72. The ALBERT DOD BROWN Memorial Scholarship,
founded by his mother, Mrs. Susan D. Brown, of Princeton, N. J., 1000
73–82. The JONATHAN DICKINSON Scholarship,
The AARON BURR Scholarship,
The JONATHAN EDWARDS Scholarship,

The SAMUEL DAVIES Scholarship,
The SAMUEL FINLEY Scholarship,
The JOHN WITHERSPOON Scholarship,
The SAMUEL STANHOPE SMITH Scholarship,
The ASHBEL GREEN Scholarship,
The JAMES CARNAHAN Scholarship,
The FRANCIS L. PATTON Scholarship,

83–87. The KENNEDY Scholarships, founded by Miss Rachel L. Kennedy, of New York, 15,000

88. The A. O. HEADLEY Scholarship, founded by A. O. Headley, Esq., of Newark, N. J., 1000

89. The HARVEY LINDSLEY Memorial Scholarship, founded by Mrs. Emeline Coney Lindsley, 1000

90. The BUTLER Scholarship, founded by William Allen Butler, Jr., Esq., 1000

91. The BROKAW Scholarship, founded by Isaac V. Brokaw, Esq., of New York, 1000

92. The EZRA NYE Memorial Scholarship, founded by his son-in-law, F. Wolcott Jackson, of Newark, 1000

93. The GRACE NEWCOMBE DENNING Scholarship, founded by Mrs. William Moir, of New York, 1000

94. Founded by a friend, 1000

95–96. The MCCORMICK Scholarships, founded by Mrs. McCormick, of Chicago. 2000

The above scholarships are for the benefit of students in the Academic Department, with the exception of the ELIZABETH VAN CLEVE Scholarship, which may be assigned to a student in the School of Science.

About sixty scholarships were founded between the years 1853 and 1858, mainly through the efforts of President Maclean and Professor Hope. The last thirty-three were founded since the beginning of the Academic year 1885–6.

97. The WILLIAM CAMPBELL TRUSDELL Memorial Scholarship, founded by his father, Warren N. Trusdell of Newark, N. J., 1000

98. The HENRY M. ALEXANDER Scholarship, founded by a friend, 1000

PECUNIARY AID.

For many years the College has, on application, remitted a portion of the tuition and other fees in the Academic Department of candidates for the ministry, of sons of ministers, and also of other applicants who present satisfactory testimonials of good moral character and of more than ordinary intellectual ability with the assurance that the aid requested is absolutely needed. In the case of students who are neither candidates for the ministry nor the sons of ministers, the remission of tuition is to be regarded as a loan to be repaid to the College whenever it can be done without serious financial embarrassment. All students in the School of Science, with the exception of the incumbent of the ELIZABETH VAN CLEVE Scholarship, are required to pay tuition.

In consequence of the liberal policy of the College the amount of tuition remitted has increased until it is now more than double the entire income from the scholarship and charitable funds. If this policy is to be continued a large increase in these funds is urgently demanded. The Trustees have accordingly appointed a joint committee of members of the Board of Trustees and of the Faculty, to increase the Scholarship Fund to $150,000. *This effort is commended to the attention and favor of the Alumni and other friends of the College.*

Scholarships may be founded by the payment of $1000 and designated as the donor may direct, the income from which will be accepted as payment of the tuition in the Academic department of *any student* to whom the donor may assign it, for *four years*—to be subsequently assignable by the Faculty.

Application for scholarships, or for aid from the charitable funds, should be made to Professor Duffield.

EXPENSES.

The following is the Schedule of the College expenses for 1895–1896.

Board, 36 weeks	$ 3.00 to $7 per week.
Washing, 36 weeks	50 cents per week.
Tuition and public room fee, Academic	150.00 per annum.
Tuition and public room fee, School of Science	160.00 per annum.
Tuition, extra for Laboratory Chemistry, Senior elective	15.00 per annum.
Room rent (according to location of rooms)	30.00 to $175 per annum.
Fuel deposit (according to location of rooms)	17.00 to $26 per annum.
Gas deposit (according to location of rooms)	24.00 to $42 per annum.
Matriculation Fee, payable on entrance	5.00
Graduation Fee, payable second term, Senior year	12.00

For other special courses than that in Analytical Chemistry arrangements may be made upon consultation with the Professor in charge.

The charges for fuel and gas are approximations based upon the greatest amount used. An account of the actual consumption is kept with each room, and the exact charge is adjusted at the end of the year. The charge for fuel includes the cost of kindling, and the labor of carrying coal, making fires, etc.

Apparatus Deposits.—Students pursuing certain courses in the School of Science are required to make deposits to pay for apparatus injured or destroyed. At the end of the term any excess in favor of the student is placed to his credit on the bill for the next term. The deposits in the courses are:—Freshmen, first term, Geodesy, $3; Sophomores, first term, Geodesy, $5; Botany, $5 (not required 1894–95); second term, Chemistry, $12. Juniors, first term, Geodesy, $6; first term, Chemistry, *c.*, $12. Seniors, first term, Geodesy, $4; Chemistry, *e.*, $15; Chemistry, *g.*, $12; Chemistry, Acad., $8; second term, Chemistry, *c.*, $10.

Students taking any of the courses in Graphics will require a drafting outfit costing from $18 to $25.

ESTIMATES OF ANNUAL EXPENSES.

ACADEMIC DEPARTMENT.

Attention is specially called to the following approximate estimate of the necessary annual expenses for a student occupying an unfurnished room in College, without including clothes, traveling or vacation expenses:

	Min.	Medium.	Max.
Board, 36 weeks, at $3.00 to $7.00	$108.00	$180.00	$252.00
Washing, 36 weeks, at 50 cents per week	18.00	18.00	18.00
Tuition and Public Room Fees	150.00	150.00	150.00
Matriculation Fee (on Entrance)	5.00	5.00	5.00
Room Rent	30.00	60.00	175.00
Fuel	10.00	20.00	30.00
Gas		10.00	25.00
Total	$321.00	$443.00	$655.00
Deduct for Students on Scholarships (See page 156.)	100.00		
	$221.00		
Candidates for Ministry in special need of aid.	30.00		
	$191.00		

COLLEGE BILLS.

All College expenses, including board, must be paid in advance to the Treasurer of the College.

Students are required to call at the Treasurer's office in the course of the first ten days of each term, and to give information as to their place of boarding, etc., so that their bills can be made out. All bills must be paid within the first four weeks of the term. Failure to comply with this rule will deprive the student of the privileges of the College until payment is made, unless excused by special vote of the Faculty.

When a student enters College before the middle of the term, he shall pay in full the usual College charges for that term, with the exception of the charges for board and washing; if he enter after the middle of the term, he shall pay one-half. For board and washing he shall pay in proportion to the time.

When a student leaves the College, whether voluntarily or by dismission, before the middle of any term, one-half of the charges for tuition and public rooms for that term shall be refunded. But in the case of temporary absence and subsequent return, although the absence be for more than half a term, no such rebate shall be granted.

When a student is dismissed from College for any cause, the advance deposit for board, washing, fuel and gas, beyond the time of his dismission, shall be refunded to his parent or guardian.

When at the end of the first term the amount of the advance deposit proves to be in excess of the sum required to defray the board, washing or room bills of any student, the excess shall be credited on his bill for the next term. At the end of the College year the amounts overpaid by the members of the *graduating class* for board, washing, room rent, fuel, or gas shall be refunded by the Treasurer to the student's parent or guardian. The parent or guardian of *every undergraduate* will be advised of the amount of excess to the credit of his son or ward, and such amount will be *carried over to his credit on the bill of the first term of the following year*. In case of withdrawal or dismissal from College of any undergraduate, at the end of the college year such excess will be refunded by the Treasurer to the parent or guardian, when informed by the Clerk of the Faculty that such undergraduate has been withdrawn or dismissed from College.

RULES GOVERNING THE ALLOTMENT AND RENTAL OF ROOMS.

1. Rooms shall be assigned for occupation during the following college year between the 15th of May and the 1st of June of each year.

2. This assignment shall embrace:

(a) All rooms occupied by students whose connection with the college will terminate at the end of the college year.

(b) The rooms of all Seniors, whether with room-mate or not. (Unless the room may be retained by a graduate or for a brother as elsewhere provided in the rules.)

(c) All rooms for which the lease has not been properly renewed.

3. An allotment may also take place at the close of the first term of each college year for the purpose of assigning such rooms as may then fall vacant.

4 *a*. The assignment of rooms shall in all cases not herein specially excepted take place in such a manner that specific rooms shall be assigned by lot.

b. The rooms to be assigned shall be classified according to the amount of their rental in five groups as follows:

1. The first group shall embrace rooms whose rental is from $25 to $35 inclusive.

2. The second group shall embrace rooms whose rental is from $40 to $66 inclusive.

3. The third group shall embrace rooms whose rental is from $70 to $100 inclusive.

4. The fourth group shall embrace rooms whose rental is from $105 to $140 inclusive.

5. The fifth group shall embrace rooms whose rental is from $150 to $180 inclusive.

c. The applicants for rooms shall be divided into corresponding groups, each applicant being required to inform the Treasurer in writing before the 10th of May or the 20th of January, as the case may be, both of his intention to enter the drawing and of the group in which he wishes to be placed.

d. Each drawing shall begin with the first group and proceed from that group through the other groups successively in the order given above. Any applicant who does not obtain a room in the group to which he first asked to be assigned may be allowed to draw in any higher group.

e. If there be any rooms remaining unassigned after a drawing, such rooms may be assigned by subsequent allotment, at such time before the end of the year or of the term as the Treasurer may appoint; such supplementary allotment to be made under the same rules as the principal allotment, with this exception, that the rooms disposed of by means of it may be classified as above or not at the discretion of the Treasurer.

f (*a*). Priority in the drawing shall be determined by the length of time the applicants have been members of college. The first drawing shall include the names of all applicants who have been members of college for more than one year. A second drawing shall include the names of all applicants who have been members of college one year or less.

f (*b*). If the application for a double room shall be signed by students who have been members of college different lengths of time, it shall be classified, and placed in the drawing in which the student who has been a member of college the shortest length of time would be placed.

g. New students shall have choice of any rooms remaining vacant at the time of their entering upon residence in the order of their application after undergoing the entrance examinations for full standing, upon condition of immediately signing the lease required in all cases. [See Rule 5, *a.*]

h. Double rooms shall be separately classified and allotted in accordance with the above regulations. Only such suites as consist of a study and two bedrooms shall be considered double rooms within the meaning of this clause. No double room shall be assigned to a single individual, nor shall it be within the privilege of any single individual to draw for a double room. Every applica-

tion for a double room must give the names of two persons who intend to occupy the room together and who undertake to be jointly responsible for the rent of the same.

i. Whenever, for any reason, one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current college term, unless he agrees to pay the whole rent, or provide a roommate who shall join him in signing a new lease for the remainder of the college year.

5. a. The tenure and liabilities to those to whom rooms are assigned under these rules shall be the tenure and liabilities expressed in the following lease, which must be signed in the case of each room allotted by the student who is to occupy it and by his parent or guardian. This lease must be signed and delivered to the Treasurer in each case within ten days of the allotment, except in the case of new students, provided for under Rule 4, *g.*

This agreement made the day of , 189 , between the Trustees of the College of New Jersey and of witnesseth that the said Trustees of the College of New Jersey do hereby lease unto the said Room No. in the Entry of to hold for the college year of paying therefor during the said term unto the said Trustees of the College of New Jersey the yearly rent of $ in two equal payments, to be made, the one within the first four weeks of the first term of the college year, the other within the first four weeks of the second term of the college year.

And the said covenants to pay the said rent in the manner and at the times aforesaid and to deliver up the said premises to the said Trustees of the College of New Jersey or its legal representative at the end of said term in as good condition as the same now are or may be put into by the said Trustees of the College of New Jersey, reasonable use and wear and tear thereof, and fire and other casualty excepted. The said lessee also covenants that he will not do or suffer to be done any damage in the leased premises, and that, if any damage beyond reasonable wear and tear be done, he will cause the same to be made good as soon as possible at his own expense, employing for that purpose the proper college workmen, and paying the cost thereof at once to the College Treasurer, it being understood that the damage here meant includes the

breakage of glass and locks, whether by accident or design. The said lessee further covenants that he will not sublet the same or any part thereof nor permit any other person or persons to occupy the same or any part thereof, nor make nor suffer to be made any alteration therein without the consent of the said Trustees of the College of New Jersey for that purpose in writing first had and obtained. And the said lessee further covenants that the said Trustees of the College of New Jersey through their authorized representatives may enter the said premises for the purpose of viewing or making improvements therein at any reasonable times in the day time, or at any other time for the legitimate purposes of college discipline. This lease is made on the express condition that it may be terminated by said Trustees through their representative.

b. Any occupant of a college room may retain his room until the end of his college or graduate course provided he annually notify the Treasurer of his intention of retaining it and sign a new lease before the 1st of May. Otherwise his room shall be considered vacant and shall be included in the next allotment. In case an occupant of a double room be left without a room-mate at the end of the college year, he may renew his lease upon condition of naming another student of the college who will become joint lessee with him for the following year. It shall also be the privilege of any occupant of a college room to renew his lease at the end of his own tenure in the name of his brother, when that brother is to enter college immediately.

c. The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of the occupant of a college room to sell or transfer, directly or indirectly, his right of occupancy shall be deemed a fraudulent transaction, and will be dealt with by the Faculty as a grave breach of college law.

d. The occupant of a college room shall deposit with the Treasurer the sum of 25 cents for each key to his room that may be furnished him by the college; and all amounts paid under this clause shall be refunded upon the return of the key or keys furnished.

6. Students vacating college rooms shall be allowed to store any furniture not disposed of in a room designated by the college authorities, under the charge of a salesman appointed by the college, where it may be offered for sale. Furniture remaining unsold at the end of four months after the date of storing shall be disposed of at public auction to the highest bidder.

7. No exchange of rooms shall be allowed unless formally sanctioned in writing by the Treasurer; and then only upon terms explicitly stated in a written application signed by both parties to the proposed exchange, and not in contravention of the spirit of these rules. Such applications shall be kept on file in the Treasurer's office.

8. When rooms are vacated during a term the rent shall be paid until the end of the term. An occupant of a college room who expects to be absent on leave for a term may be released from the obligations of his lease, provided he notify the Treasurer before the beginning of the term during which he expects to be absent, and give up the room; but no abatement or drawback of room rent shall be allowed for any period less than a college term, except in special cases, to be stated in writing, and by permission of the Treasurer.

Adopted by the Committee on Grounds and Buildings, February 9th, 1891.

STUDENTS OF THE COLLEGE.

GRADUATE STUDENTS.

N. B.—Fellows are not included in the following list. (Vide p. 22.)

George Irving Adams, Emporia, Kan., 40 Wiggins St.
Kansas University, A.M., 1895.

William Park Armstrong, Jr., Selma, Ala., 201 H S
A.B., Princeton, 1894.

Edward John Baird, Louisville, Ky., 32 A S
A.B., Central University, Ky., 1894.

Alfred Hamilton Barr, Tyrone, Pa., 217 H S
A.B., Princeton, 1889; A.M., 1892.

Henry Coleman Baskerville, Goode's Ferry, Va., 5 B S
A.B., University of Georgia, 1868.

Francis Walker Beidler, St. Cloud, Minn., 30 A S
A.B., Macalester College, Minn., 1894.

Robert William Blake, Princeton, N. J., Leipsic.
A.B., Princeton, 1887; A.M., 1890.

William John Bone, Thorndale, Pa., 11 B S
A.B., Princeton, 1895.

Charles Henry Hardin Branch, Ellicott City, Md., 12 B S
A.B., Johns Hopkins University, 1895.

John Milton Brooks, Cleveland, O., 50 Nassau St.
A.B., Princeton, 1889; A.M., 1891.

Thomas Towson Brown, Jacksonville, Md., 62 B S
A.B., Lafayette, 1895.

Arthur Audley Brownlee, Indiana, Pa., 7 U
A.B., Princeton, 1889; A.M., 1891.

Henry Martin Bruins, Alto, Wis., 9 B S
A.B., Hope College, Mich., 1895.

George Washington Bryant, Mt. Clemens, Mich., 108 H S
A.B., Coe, 1894.

George Hough Bucher, Carlisle, Pa., 3 A S
A.B., Dickinson, 1895.

Robert Paterson Byers, A.M., Princeton, 1895.	Ganonoque, Ont.,	205	H	S
Charles Lucius Candee, A.B., Princeton, 1895.	Evanston, Ill.,	65	B	S
Ray Harrison Carter, A.B., Princeton, 1895.	Philadelphia, Pa.,	5	B	S
Harvey Steele Christian, A.B., College of Emporia, 1894.	Carlyle, Kan.,	67	B	S
James Carpenter Coleman, Jr., A.B., Princeton, 1894.	Goshen, N. Y.,	22	A	S
Leonard Colyn, A.B., Grand Rapids College, 1892.	Pella, Ia.,	405	H	S
Charles Beach Condit, A.B., Princeton, 1895.	West Orange, N. J.,	3	B	S
Lester Morris Conrow, A.B., Princeton, 1895.	Long Branch City, N. J.,	202	H	S
William Brown Cooke, A.B., Princeton, 1895.	Wheeling, W. Va.,	16	A	S
John Walker Coontz, A.B., Scarritt, 1895.	Neosho, Mo.,	49	B	S
Oliver Crawford, Royal University, Ireland.	Mountjoy, Omagh, Ire.,	42	A	S
Samuel Dickey, A.B., Princeton, 1894.	Oxford, Pa.,	408	H	S
Daniel Weaver Dexter, A.B., Princeton, 1895.	Elmira, N. Y.,	6	B	S
William Henry Dodd, A.B., Princeton, 1893.	Newark, N. J.,	13	B	S
Thomas Corwin Doran, A.B., New Windsor College, 1893.	Baltimore, Md.,	113	H	S
Joel Ambrose Dunkle, A.B., Heidelberg College, 1894.	Circleville, O.,	56	B	S
Harry Schwartz Ecker, A.B., New Windsor College, Md., 1894.	New Windsor, Md.,	69	B	S
Sherwood Eddy, Ph.D., Yale, 1891.	Leavenworth, Kan.			
Walter McKee Elliott, A.B., Wabash, 1895.	Crawfordsville, Ind.,	58	B	S
Theodore Allen Elmer, A.B., Lafayette, 1894.	Fairton, N. J.,	64	B	S

Jay Carroll Everett, Olpe, Kan., 20 B S
A.B., College of Emporia, 1894.

Wallace Somerville Faris, Pittsburgh, Pa., 87 B S
A.B., Leland Stanford Jr. University, 1893.

Marcus Stults Farr, Cranbury, N. J.
A.B., Princeton, 1892, M.S., 1893; A.M., University of Chicago, 1894.

William Foster, Jr., Hartford, Ky., 175 Nassau St.
A.B., Hartford College, 1892.

Cleveland Frame, Philadelphia, Pa., 29 A S
A.B., Princeton, 1894.

Alexander Fraser, Achnadarroch, Scotland, 59 B S
A.B., College of Emporia, 1894.

Demeter Nicola Furnajieff, Bansko, Macedonia, 15 B S
A.B., Princeton, 1895.

Robert Reed Gailey, Fawn Grove, Pa., 117 H S
A.B., Lafayette, 1896.

George William Goodale, Pomona, Cal., 56 B S
A.B., Baker University, Kan.

Loyal Young Graham, Jr., Philadelphia, Pa., 21 B S
A.B., New Windsor College, Md., 1892.

Charles Ernst Gubler, Evansville, Ind., 417 H S
A.B., Indiana University, 1893.

George Louis Guichard, Allegheny, Pa., 34 B S
Ph.B., Franklin College, 1894.

Norman Baldwin Harrison, Caldwell, N. J., 165 Nassau St.
A.B., Princeton, 1895.

Selden Long Haynes, S. McAlester, Ind. Ter., 18 B S
A.B., Princeton, 1895.

Fred. Jay Hibbard, Fargo, N. Dak., 27 A S

William Charles Hogg, Bellagy, Co. Derry, Ire., 29 B S
Magee College, Londonderry, 1893.

Henry Burns Hostetter, Crawfordsville, Ind., 404 H S
B.S., Wabash, 1894.

Joseph Howell, Pen Argyl, Pa., 24 A S
A.B., Lafayette, 1894.

William Brewster Hunt, Ottawa, Ill., 415 H S
A.B., Lake Forest, 1894.

Joseph Hunter, Castlerock, Ireland, 20 A S
A.B., Royal University of Ireland, 1894.

Paul Griswold Huston, Cincinnati, O., 6 N W
A.B., Princeton, 1895.

John Leonard Hynson, Church Hill, Md., 108 H S
A.M., Dickinson, 1895.

Robert Bonner Jack, Hazleton, Pa., 400 H S
A.B., Princeton, 1894.

Henry Ezekiel Jackson, Coatesville, Pa., 203 H S
A.B., Lafayette, 1893; A.M., Princeton, 1895.

Franklin Cornwell Jennings, Union, S. C., 317 H S
A.M., Presbyterian College of S. C., 1892.

William Mason Jennings, Greenwood, Ind., 16 Canal St.
A.B., Wabash, 1890.

Harris Clubb Johnson, Morris Hill, Ind., 66 B S
A.B., Hanover College, 1895.

Samuel Martin Jordan, Stewartstown, Pa., 25 A S
A.B., Lafayette, 1895.

Ernest Farwell Keigwin, Wilmington, Del., 27 B S
A.B., Princeton, 1894.

Harvey Wilson Koehler, Kingston, Pa., 23 A S
A.B., Princeton, 1895.

Marcius Wilson Kratz, Silver Dale, Pa., 72 B S
A.B., Lafayette, 1895.

Ralph Henry Kunstadter, New York City, 47 Univ. Pl.
M.Sc., Princeton, 1895.

Henry Winters Luce, Scranton, Pa.,
A.B., Yale, 1892.

William Brown Lusk, Belfast, Ireland, 20 A S
Queen's College.

Joseph Ernest McAfee, Parkville, Mo., 8 B S
A.B., Park College, Mo., 1889.

Clifford McBride, Indianapolis, Ind., 406 H S
A.B., Princeton, 1894.

Charles Freeman Williams McClure, Princeton, N. J., 80 Univ. Pl.
A.B., Princeton, 1888; A.M., 1892.

Ira McConaughy, Superior, Neb., 38 B S
A.B., Hastings College, Neb., 1890.

Russle Hindman MacCullough, North East, Md., 16 B S
B.S., Lafayette, 1895.

William Worthington McHenry, Lincoln Univ., Pa., 42 B S
A.B., Lincoln University, 1894.

John Archibald McKee, Remington, Ind., 6 A S
A.B., Wabash, 1894.

William Thomas McKinney, Fredericktown, O., 54 B S
A.B., Wooster University, 1894.

William Irvin McNair, Louisville, Ky., 32 A S

Chauncey Byron Magill, Buffalo, Pa., 19 B S
A.B., Ada College, O., 1893.

William Hammersley Mason, Girard, Kan., 28 B S
A.B., Park College, 1895.

Henry Buck Master, Philadelphia, Pa., 44 B H
A.B., Princeton, 1895.

John Moffatte Mecklin, French Camp, Miss., 57 B S
A.B., S. W. Pres. University, 1890; A.M., 1892.

Samuel Melkonyan, Tarsus, Asia Minor, 75 B S
St. Paul's Institute.

Charles Anderson Mitchell, Bellevue, Neb., 207 H S
A.B., Bellevue College, Neb., 1892.

Lynford Lardner Moore, Huntersville, N. C., 14 A S
A.B., Davidson College, N. C., 1889; M.D., Jefferson Medical College, 1893.

Samuel Williams Moore, Hopewell, N. C., 14 A S
A.B., Davidson College, N. C., 1893.

William Sands Morley, Oskaloosa, Kan., 402 H S
A.B., College of Emporia, 1893.

Charles Frederick Morrison, Amritsr Panjab, India, A, A S
A.B., Princeton, 1894.

Walter Moses, Trenton, N. J., 77 U
B.S., Princeton, 1895.

Harry Nowland Mount, Shannondale, Ind., 46 B S
A.B., Wabash, 1894.

Isaac Stanley Mulholland, Pittsburgh, Pa., 24 A S
A.B., Lafayette College, 1894.

Fred Neher, Princeton, N. J., 80 Univ. Pl
A.B., Princeton, 1889; A.M., 1891.

John Campbell Neill, New York City, 40 B S
A.B., College of City of New York, 1895.

Edwin Mark Norris, Corning, Ia., 1 S D
A.B., Princeton, 1895.

Joseph William Park, Corinth, Miss., 4 S W
A.B., Princeton, 1895.

Alexander Hamilton Phillips, Princeton, N. J., Stony Brook
B.S., Princeton, 1887.

Jacob Poppen, Leonia, N. J.

Dwight Elwood Potter, Peabody, Kan., 31 B S
A.B., Kansas State University, 1892.

Samuel Dobbins Price, Newark, N. J., 105 H S
A.B., University of the City of New York, 1883.

Emmet Wollen Rankin, Akron, O., 17 B S
A.B., Park College, 1888; A.M.

John Ballard Rendall, Jr., Lincoln University, Pa., 110 H S
A.B., Lincoln University, 1892.

Samuel Christmas Kanaga Rutnam,
Tellippallai Jaffna, Ceylon, 73 B S
A.B., Madras Christian College, 1892.

James Alvan Sankey, Emporia, Kan., 67 B S
A.B., College of Emporia, 1895.

Joseph Landor Scott, Dungannon, Ire., 36 A S
Magee College, Londonderry, Ire., 1893.

Elmer Clifton Shaver, Shannondale, Ind., 46 B S
Wabash.

William Luther Schmalhorst, Conway, Mo., 204 H S
A.B., Drury College, Mo., 1893.

Alexander Smith, Clydesdale, Nova Scotia, 14 B S
A.B., Dalhousie.

Walter Everett Smith, Philadelphia, Pa., 469 B S
A.B., New Windsor College, 1895.

Samuel Wilbur Steckel, Riegelsville, Pa., 7 B S
A.B., New Windsor College, 1893.

George Harvey Trull, Baltimore, Md., 41 B S
A.B., Johns Hopkins University, 1894.

John Van de Erve, Hein, South Dakota, 33 B S
A.B., Hope College, Mich., 1895.

George Handy Wailes, Salisbury, Md., 27 B S
A.B., Princeton, 1894.

Alfred Frederick Waldo, Birmingham, Mich., 415 H S
A.B., Lake Forest.

Howard Crosby Warren, Princeton, N. J., 10 Bayard Av.
A.B., Princeton, 1889; A.M., 1891.

Frank Allan Waterman, A.B., Princeton, 1888.	Princeton, N. J., 69 Prospect Av.	
Clarke Benedict Williams, A.B., Princeton, 1890.	Corning, N. Y., Kalamazoo, Mich.	
Clinton Tyler Wood, A. B., Princeton, 1893, A.M., 1896.	Fargo, N. Dak.,	27 H S
Louis Clayton Woodruff, A.B., Princeton, 1895.	Southington, Conn.,	7 N Ed
Clarence Elmer Woody, A.B., Penn College, Ia.	Hubbard, Ia.,	7 A S

GRADUATE STUDENTS, ... 119

STUDENTS IN THE ACADEMIC DEPARTMENT.

SENIOR CLASS.

Francis Olcott Allen, Jr.,	Philadelphia, Pa.,	18 N E
Henry Beard Armes,	Washington, D. C.,	2 W W
William Mayo Atkinson,	Elizabeth, N. J.,	10 S E B
Frank Allen Baker,	Philadelphia, Pa.,	8 N E
Mason Brown Barret,	Frankfort, Ky.,	11 M D
Jacob Newton Beam,	Intercourse, Pa.,	3 S Ed
Andrew Jefferson Berry,	Augusta, Ga.,	21 M D
Edward Hodge Bishop,	East Orange, N. J.,	5 N E
Charles Byron Bostwick,	New York City,	12 M D
Laurance Foster Bower,	Pittsburgh, Pa.,	76 U
Carl Miner Bowman,	Philadelphia, Pa.,	5 E B
Robert Walter Brace,	Blackwood, N. J.,	6 E B H
Edward Swayne Brearley,	Lawrenceville, N. J.,	89 N Ed
Charles Oscar Bressler,	Lebanon, Pa.,	8 S M E
Milner Brien,	Dayton, O.,	3 W W
Henry Clay Briggs,	Brooklyn, N. Y.,	14 N M E
Edwin Henry Bronson,	Philadelphia, Pa.,	1 N Ed
Macy Brooks,	Philadelphia, Pa.,	46 U
Charles Browne,	Philadelphia, Pa.,	9 E B
Henry Munro Bruen,	Belvidere, N. J.,	79 U H
James Bayley Bruen,	Belvidere, N. J.,	79 U H
Sydney Serrill Bunting,	Philadelphia, Pa.,	63 U
John McDowell Carnochan,	Towanda, Pa.,	6 S E
Pierce Annesley Chamberlain,	Bahia, Brazil,	41 N Ed
Philip Hudson Churchman,	Burlington, N. J.,	7 S E
Brutus Junius Clay, Jr.,	Paris, Ky.,	7 S W
James Blair Cochran,	Morristown, N. J.,	11 S E
Theodore Clifford Coe,	Newark, N. J.,	24 N Ed
Henry Welty Coulter,	Greensburg, Pa.,	1 N D
Josiah Hughes Crawford,	Philadelphia, Pa.,	1 N E
Mordecai Jackson Crispin,	Berwick, Pa.,	5 N D

Benjamin Dangerfield, Jr.,	Pittsburgh, Pa.,	68 Nassau St.
Samuel Boyer Davis.	Philadelphia, Pa.,	10 W W
John Ross Delafield,	New York City,	17 N E
Alfred Lewis Pinneo Dennis,	New York City.	13 E W
Edward Lewis Dodd,	Orange, N. J.,	9 S D
Alfred Abel Doolittle,	Hang Chow, China.	15 S M R
William Furman Doty,	Washington, D. C.,	10 N E
Alexander Nelson Easton,	Summit, N. J..	17 N W
David Farragut Edwards,	Jersey City, N. J.,	15 N D
James Johnston Elliott,	Murfreesboro, Tenn..	4 S W B
John Pinney Erdman,	Morristown, N. J.,	2 S D
Charles Milton Evans,	Towanda, Pa.,	10 N
David Fentress,	Chicago, Ill.,	8 W M W
William Alexander Fisher, Jr.,	Baltimore, Md.,	19 M D
Alexander Robert Fordyce, Jr.,	Newark, N. J.,	8 S E B
John Calvin French, Jr., A.B.,	Prosperity, Pa.,	5 Edwards Pl.
Thomas Galt, Jr.,	Aurora, Ill.,	20 M D
Nelson Burr Gaskill,	Mt. Holly, N. J.,	7 S E B
Thomas Logan Gaskill,	Mt. Holly, N. J.,	8 S Ed
John Randolph Graham,	Winchester, Va.,	22 S Ed
Eugene Gray,	Columbus, O.,	26 M D
Louis Herbert Gray,	Newark, N. J.,	39 Vandeventer Av.
Meldrum Gray,	Columbus, O.,	26 M D
Woodward Keeling Greene,	Cedar Rapids, Ia.,	23 M D
Warren Jackson Haines,	Elkton, Md.,	8 S E B
Benjamin Schuyler Halsey,	North Paterson, N. J.,	5 E B
Edward William Hamilton,	New York City,	8 W B
George Gordon Hammill,	New York City,	K, U
Edward Blanchard Hodge, Jr.,	Burlington, N. J.,	7 S R
Frederick Evans Hoffman,	Fort Wayne, Ind.,	9 S E
Alfred Muirheid Howell,	Cogan Station, Pa.,	12 S M R
Augustine Leftwich Humes,	Knoxville, Tenn.,	18 M D
Alexander Jackson,	Berwick, Pa.,	2 E M W
William Herron Jamison,	Allegheny, Pa.,	12 Vandeventer Av.
Archibald Todd Johnson,	Philadelphia, Pa.,	C, E B
Clarence Melville Johnson,	Washington, D. C.,	5 N M R
Gordon Johnston,	Birmingham, Ala.,	8 S E B
John Campbell Kerr,	Englewood, N. J.,	6 & 7 U
Alfred Gedney Killmer,	Bound Brook, N. J.,	8 S M R

Leroy Kirkman,	Port Jervis, N. Y.,	17	N W
James Carnahan Knight,	Chicago, Ill.,	4	S D
Robert Ryland Knight,	Shelbyville, Ky.,	6	E B
William Edmund Lampe,	Frederick, Md.,	18	S E
LeRoy Porter Leas,	Philadelphia, Pa.,	8	N E
William Wirt Leonard,	Salisbury, Md.,	14	M D
Robert Lincoln Litch,	Bethlehem, Pa.,	27	William St.
Robert Forsyth Little, Jr.,	New York City,	5 & 8	U
Frederick William Loetscher,	Dubuque, Ia.,	31	S Ed
Joseph Mackey Roseberry Long,	Bangor, Pa.,	7	M D
John Hancock Louser,	Lebanon, Pa.,	3	N Ed
Albert Howe Lybyer,	Brazil, Ind.,	7	W B
Francis Charles McDonald,	Mt. Union, Pa.,	16	S M R
Robert McNutt McElroy,	Lebanon, Mo.,	27	William St.
William Strong McGuire,	Norwalk, O.,	8	E M W
Scott McLanahan,	Chambersburg, Pa.,	10	N D
Wallace Donald McLean,	Washington, D. C.,	13	S W
Charles Bell McMullen, A.B.,	Tarkio, Mo.,	18	S E
Benjamin Allen Masson, A.B.,	Albia, Ia.,	60	Univ. Pl.
William Arnot Mather,	New York City,	10	N E
William Francis Mattingly, Jr.,	Washington, D. C.,	13	S W
Robert Maxwell,	East Greenwich, N. Y.,	37	N Ed
Albert Goodsell Milbank,	New York City,	5 & 8	U
Samuel Wilson Miller, Jr.,	Saltsburg, Pa.,	12	E B
Edward Kirkpatrick Mills,	Morristown, N. J.,	5	S W B
Frederic Livingstone Mills,	Jamaica, N. Y.,	40	S Ed
George Franklin Moll, A.B.,	Highland, Kan.,	22	Edwards Pl.
John James Moment,	Orono, Ont.,	3	W B
Harry Morgan Moore,	California, Mo.,	11	S W
Minot Canfield Morgan,	Remsenburg, N. Y.,	17	M D
Roland Sletor Morris,	San Rafael, Cal.,	6 & 7	U
Frederick Pooley Mudge,	Princeton, N. J.,	1	E B
William Henry Musser,	Harrisburg, Pa.,	10	S Ed
Joseph Laurence Myers,	Princeton, N. J.,	94	Bayard Av.
William Vastine Oglesby,	Danville, Pa.,	36	N Ed
Frank Clifford Okey,	Corning, Ia.,	B,	W B
Willette Bronson Orr,	Chambersburg, Pa.,	12	S Ed
Singleton Peabody Outhwaite,	Washington, D. C.,	8	N E
John Rosseel Overton,	Towanda, Pa.,	7	S W

David Park,	Corinth, Miss.,	4 S W
Charles Edgar Patton,	Warriors Mark, Pa.,	40 N Ed
Robert Hunter Patton, 2d,	Princeton, N. J.,	Prospect
Frederick Marshall Paul,	New Brunswick, N. J.,	18 M D
Ralph Barton Perry,	New York City,	18 N E
Harry Gordon Pierce,	Wayland, N. Y.,	1 S D
Talbot Eugene Pierce,	Washington, D. C.,	12 E W
David Potter,	Bridgeton, N. J.,	18 N W
John Albert Potter,	Franklin, N. Y.,	19 N E
Stanley Chester Reese,	Pittsburgh, Pa.,	26 S Ed
Joseph Cottrell Righter, Jr.,	Williamsport, Pa.,	80 U
Samuel Gayle Riley, A.B.,	Georgetown, Ky.,	76 Univ. Pl.
Joseph George Rosengarten, Jr.,	Philadelphia, Pa.,	14–15 U
Frederick Tupper Saussy,	Savannah, Ga.,	8 W M W
John Hinsdale Scheide,	Titusville, Pa.,	14 E W
John Charles Sherriff,	Allegheny City, Pa.,	17 S E
William Duncan Silkworth,	Fishkill, N. Y.,	11 S W
James Dunn Small,	Baltimore, Md.,	3 S E B
Ralph Brown Smith,	Blairsville, Pa.,	12 E B
Francis Sydney Smithers, Jr.,	New York City,	15 E W
Homer Clay Snitcher,	Greenwich, N. J.,	18 S W
William Francis Mattingly Sowers,	Washington, D. C.,	12 E W
Samuel Robert Spriggs,	Livingston Manor, N. Y.,	16 S Ed
Thomas Henry Atherton Stites,	Wyoming, Pa.,	10 S W B
William LeRoy Stockton,	Princeton, N. J.,	98 Mercer St.
Joseph Herbert Stopp, A.B.,	Allentown, Pa.,	48 U
William Paton Thomson,	Altoona, Pa.,	15 S W
Warren Merwin Tower,	Brooklyn, N. Y.,	3 W B
John Moore Trout,	Bridgeville, Del.,	16 S Ed
Edward Bates Turner,	Corning, Ia.,	B, W B
Ralph Ernest Urban,	Dunmore, Pa.,	17 E W
Herbert Ure,	Newark, N. J.,	5 N E
Frank Phineas Van Syckel,	Elberon, N. J.,	2 N W
Edwards Pierrepont Ward,	Dansville, N. Y.,	6 S E B
Frank Hawley Ward,	Rochester, N. Y.,	6 S E B
Dorr Eugene Warner,	Unionville, O.,	18 N Ed
John Waterhouse,	Honolulu, Hawaiian Is.,	17 E W
George Henry Waters,	Peekskill, N. Y.,	8 & 10 N Ed
Leon Joseph Wayave, Jr.,	Corning, N. Y.,	11 N M B

Paul Charles Weed,	St. Paul, Minn.,	7 E M W
Thomas Youngs Wickham,	Ainsworth, Ia.,	1 S E
Charles Frederick Williams,	New York City,	7 S W
Curtis Moore Willock,	Allegheny, Pa.,	68 Nassau St.
Charles Alexander Wilson, A.B.,	Tarkio, Mo.,	18 S E
William Rolla Wilson,	Denver, Col.,	19 N W
Charles Wesley Wisner, Jr.,	Baltimore, Md.,	2 S W
Charles Ladd Woodburn,	Towanda, Pa.,	6 S E
Edward Strong Worcester,	Burlington, Vt.,	19 N E
Willard Jurey Wright,	Lebanon, O.,	15 M D
Philip Walter Yarrow,	Lowell, Mass.,	18 S M E
Jesse Reinhart Zeigler, A.B.,	Mercer, Pa.,	19 N W

SENIORS, ... 160

JUNIOR CLASS.

Henry Brown Abbot,	Zanesville, O.,	15 N E
Alexander John Atcheson Alexander,	Spring Station, Ky.,	15 N E
Walter Haskell Andrus,	Williamsport, Pa.,	9 N E
Edward William Axson,	Princeton, N. J.,	4 M D
Henry Milton Beam,	Intercourse, Pa.,	3 S Ed
Jerome Bradley,	Dobbs Ferry, N. Y.,	7 E W
Francis Solomon Brenneman,	Volant, Pa.,	35 S Ed
Howard Crosby Brokaw,	New York City,	8 E W
Frederick Walworth Brown,	Manasquan, N. J.,	38 N Ed
Thomas Cadwalader,	Philadelphia, Pa.,	19 M D
William Wells Church,	Washington, D. C.,	12 N M E
Percy Robert Colwell,	Warwick, N. Y.,	18 S Ed
Robert Comin,	New Concord, O.,	11 N
LeRoy Clark Cooley, Jr.,	Poughkeepsie, N. Y.,	18–19 S Ed
Frank Bertine Cowan,	Hobart, N. Y.,	20 S E
John Hamilton Cowan,	Pittston, Pa.,	9 S Ed
Earl Walker Cox,	Harrisburg, Pa.,	8 S E
Roy Galbraith Cox,	Harrisburg, Pa.,	8 S E
George Knowles Crozer, Jr.,	Philadelphia, Pa.,	8 S W E
Frank Grenville Curtis,	New York City,	5 S W
William Potter Davis, Jr.,	Millville, N. J.,	12 S W
Walter Moore Dear,	Jersey City, N. J.,	18 N M E
Walter Meredith Dickinson,	Trenton, N. J.,	15 W W
John Trumble Downing,	Pittston, Pa.,	14 S M E

Charles Johnson Dunlap,	Watertown, N. Y.,	13 N M R
Charles Francis Dunn,	Scroggsfield, O.,	6 S M R
Edward Graham Elliott,	Murfreesboro, Tenn.,	9 N R
Seward Erdman,	Morristown, N. J.,	2 S D
Thomas St. Clair Evans,	Blairsville, Pa.,	1 N W
William Fuller Evans,	Greenville, Pa.,	20 W W
John Musser Frame,	Reading, Pa.,	16 N W
Charles Lamb Furbay,	Short Creek, O.,	35 S Ed
Selden Ely Gill,	Philadelphia, Pa.,	8 W W
Walter Beatty Gilmore,	Chambersburg, Pa.,	4 S E
John William Graham, Jr.,	Denver, Col.,	15 N W
Albert Brooks Graver,	Oakmont, Pa.,	8 N D
Julian Arthur Gregory,	East Orange, N. J.,	112 Nassau St.
Archibald Alexander Gulick,	Princeton, N. J.,	26 Mercer St.
John Porter Hall,	Minneapolis, Minn.,	10 N Ed
Robert Lee Hallett,	Milford, Del.,	5 N Ed
John Linton Harkness,	Philadelphia, Pa.,	2 S W B
Norris William Harkness,	Philadelphia, Pa.,	2 S W B
Herbert Staley Harris,	Rochester, N. Y.,	15 S M R
Walter Stewart Harris,	Minneapolis, Minn.,	8 N E
William Henry,	Princeton, N. J.,	100 Stockton St.
Walter Craig Hill,	Covington, Ky.,	7 E B
James Morley Hitzrot,	McKeesport, Pa.,	8 N D
Dwight Ellinwood Hollister,	Rutherford, N. J.,	22 M D
William S. Holmes,	Freehold, N. J.,	18 S D
Augustine Minshall Hopper,	Baltimore, Md.,	4 E M W
George Howe,	Philadelphia, Pa.,	4 M D
John Gere Jayne,	Berwick, Pa.,	2 E M W
Frederick Nevins Jessup,	Beirut, Syria,	18 S Ed
Willard Parker Jessup,	Goshen, N. Y.,	20 E W
John Henry Keener,	Harrisburg, Pa.,	5 N Ed
George Harrington Kelly,	East Liverpool, O.,	12 N E
Francis Adonijah Lane,	Franklin, O.,	20 N E
Arthur Willis Leonard,	Cincinnati, O.,	12 N D
William Heberton Liggett,	Cedar Knoll, Pa.,	5 S Ed
James McClure,	Pittsburgh, Pa.,	1 S E
William Allen McLaughlin,	Ocean Grove, N. J.,	15 N Ed
David Magie, Jr.,	New York City,	2 M D
Burton Rockwood Miller,	Germantown, Pa.,	4 S R

Joseph Walter Miller,	Friesburg, N. J.,	18 S W
Lucius Hopkins Miller,	Roselle, N. J.,	6 S W B
Duncan Mackay Moore,	Mt. Carroll, Ill.,	9 Park St.
John Tomys Moore,	Arnold Station, Pa.,	144 Nassau St.
Victor Philip Mravlag,	Elizabeth, N. J.,	H, U
Daniel Edward Nevin,	Pittsburgh, Pa.,	35 S Ed
Frederick Janvier Newton,	Jalandhar, India,	28 Chambers St.
John Henry Nichols,	Delhi, N. Y.,	30 S Ed
Herschel Augustus Norris,	Woodstown, N. J.,	1 W B
Henry Chapman Olcott,	New York City,	5 N E
Horace Greeley Padget,	Owego, N. Y.,	35 N Ed
Samuel Morrow Palmer,	Philadelphia, Pa.,	2 M D
Ariovistus Pardee,	Germantown, Pa.,	9 S W
Austin McDowell Patterson,	Xenia, O.,	33 S Ed
True Perkins,	Cleveland, O.,	10 S E
Farrand Baker Pierson,	Brooklyn, N. Y.,	1 N W
Wilfred McIlvaine Post,	Beirut, Syria,	17 S Ed
William Boyd Ramsey,	Belle Centre, O.,	18 S Ed
Harry Norman Reeves,	Montclair, N. J.,	6 N M E
Theodore Fairbanks Reynolds,	East Orange, N. J.,	14 S D
Will Ayres Reynolds,	Atlantic City, N. J.,	2 E M W
Charles Gorman Richards,	Pittston, Pa.,	14 S M E
Charles Kirkland Roys,	Lyons, N. Y.,	4 S W
Henry Norris Russell,	Oyster Bay, N. Y.,	79 Canal St.
Edwin Howard Scott,	White Haven, Pa.,	D, W B
Walter Allen Seymour,	New York City,	10 W M W
Leander Howard Shearer,	New York City,	30 N Ed
William Headley Smith,	Newark, N. J.,	7 S E
James Smitham,	Nesquehoning, Pa.,	16 N Ed
Nathan Smith Smyser,	Ft. Wayne, Ind.,	6 N E
Richard Briggs Smyth,	Charleston, S. C.,	10 E M W
Selden Spencer,	St. Louis, Mo.,	1 W M W
Nicholas Stahl,	Scranton, Pa.,	3 N E
Edwin McMaster Stanton,	Philadelphia, Pa.,	11 E B
Robert Fulton Sterling,	Blairsville, Pa.,	4 N W
William Adams Walker Stewart,	New York City,	21 Prospect Av.
Henry Ford Stockwell,	Hammonton, N. J.,	1 W B
Hervey Studdiford,	Trenton, N. J.,	3 S W
Frederick Sturges, Jr.,	New York City,	13 W W

Frank Delaney Taggart,	Parkesburg, Pa.,	52 S Ed
Charles Irving Taylor,	Waterbury, Conn.,	24 S Ed
Benjamin Harvey Thompson,	Pittsburgh, Pa.,	1 W M W
Edward Cameron Thompson,	Goshen, N. Y.,	4 S Ed
Samuel Huston Thompson, Jr.,	New Brighton, Pa.,	12 W B
Paul Tillinghast,	Englewood, N. J.,	8 E B
Charles Dunbar Trumbull,	Kansas City, Mo.,	10 E W
Albert Clinton Tyler,	Wyoming, O.,	31 N Ed
Franklin Upshur,	Baltimore, Md.,	1 Nassau St.
Harry Van Cleaf,	Hightstown, N. J.,	36 S Ed
Harry Barnes von Krug,	Kingston, Pa.,	19 S M R
John Talbot Ward,	Denver, Col.,	28 N Ed
George Shadford Waterhouse,	Honolulu, Hawaiian Is.,	6 W B
Julius Pierson Wheeler,	Montclair, N. J.,	D, W B
Ephraim Williams, Jr.,	Stonington, Conn.,	11 E B
John Adams Williams,	Nescopeck, Pa.,	5 N D
Percy Herbert Williams,	New York City,	6 N E
John Fleming Wilson,	Portland, Or.,	20 N Ed
Frank Montgomery Wood, Jr.,	Fargo, N. D.,	31 N Ed
Allen Stewart Wrenn,	Cincinnati, O.,	1 S W B
Walter Scott Yeatts,	St. David's, Pa.,	35 U

JUNIORS, ... 123

SOPHOMORE CLASS.

Daniel Fickes Altland,	Dillsburg, Pa.,	19 N Ed
Alfred Edward Alton,	Troy, N. Y.,	21 S Ed
Charles Bradley Andrews,	Zanesville, O.,	4 N R
George Alexander Armstrong,	Newburgh, N. Y.,	42 S Ed
David Boyce Bannerman,	Brooklyn, N. Y.,	9 U
William Francis Barret,	Frankfort, Ky.,	11 M D
Henry Linn Bassett,	Langhorne, Pa.,	14 Vandeventer Av.
Ward Atlee Batchelor,	Buffalo, N. Y.,	14 N Ed
Louis Pintard Bayard, Jr.,	Short Hills, N. J.,	35 Univ. Pl.
Robert Livingston Beecher,	Vancouver, B. C.,	45 Univ. Pl.
Harry Elijah Belcher,	Newark Valley, N. Y.,	E, E B
Robert Smith Birch,	Reading, Pa.,	16 N W
John Hugh Bissell,	West Medford, Mass.,	40 Mercer St.

John Insley Blair, Jr.,	New York City,	2 W B
George Goodwin Bliss,	Newark Valley, N. Y.,	9 W B
Alexander Russell Bond,	Plainfield, N. J.,	4 N E
Robert Rankin Boyce,	East Orange, N. J.,	14 N W
Hamilton Boyd,	Fonda, N. Y.,	33 Chambers St.
Frankland Briggs,	Trenton, N. J.,	8 E W
Hugh Arbuthnot Brown,	Manasquan, N. J.,	38 N Ed
Lester Peck Bryant,	Princeton, Ill.,	16 N Ed
William Hartwell Butterworth,	Watertown, N. Y.,	14 N M E
James Henry Caldwell, Jr.,	Titusville, Pa.,	6 E M W
William Tuttle Carter, Jr.,	Newark, N. J.,	14 N W
John Woolman Churchman,	Burlington, N. J.,	10 S M E
Edgar Marvin Clark,	Philadelphia, Pa.,	19 W W
Benjamin Coates,	Philadelphia, Pa.,	45 U
Charles Grenville Cole,	Dunmore, Pa.,	21 N Ed
William Silvanus Covert,	Bloomville, N. Y.,	30 S Ed
Chauncey Gilbert Cowell,	East Orange, N. J.,	9 Park St.
Clarence Porter Cowles,	Albany, Vt.,	37 S Ed
John Wallace Cunningham,	Blairsville, Pa.,	1 S Ed
Robert Hare Davis,	Philadelphia, Pa.,	47 U
John Barclay DeCoursey,	Philadelphia, Pa.,	35 U
Irvine Rutherford Dickey,	Oxford, Pa.,	11 E W
Franklin Woolman D'Olier,	Burlington, N. J.,	10 S M E
Seth Russell Downie,	Harrisburg, Pa.,	32 N Ed
Robert Dunning Dripps,	Philadelphia, Pa.,	17 S W
Francis Elbert DuBois,	New York City,	6 S E
Everett Dwight,	Plainfield, N. J.,	14 S D
Arthur Read Elmer,	Trenton, N. J.,	4 S M E
Frank Nelson Emerson,	Peoria, Ill.,	O, U
Howard Crosby Foster,	New York City,	19 S E
William Hanington Galarneau,	Albion, N. Y.,	18 Vandeventer Av.
Charles Albert George,	New York City,	2 S M E
Elmer Ewing Green, Jr.,	Trenton, N. J.,	7 W W
Henry Harrison Hadley, Jr.,	New York City,	61 U
Charles Harrison Hale,	Columbus, Miss.,	1 N M E
Charles Woodruff Halsey,	Mt. Vernon, N. Y.,	34 S Ed
Ralph Werner Harbison,	Allegheny, Pa.,	35 Univ. Pl.
William Albert Harbison,	Allegheny, Pa.,	35 Univ. Pl.

Albert Windemuth Harris,	Newark, N. J.,	9 N D
Harry Wilde Harris,	East Orange, N. J.,	44 U
Andrew Edward Harvey,	Detroit, Mich.,	1 N E
Ralph Woods Hench,	Harrisburg, Pa.,	28 N Ed
Russell Howland,	Newark, N. J.,	F, U
Paul Hurst,	Washington, D. C.,	4 S E B
Elliott Mason Irvine,	Yonkers, N. Y.,	12 N E
Oliver Wolcott Jackson,	Newark, N. J.,	11 N W
Edward Rutter James,	Ashley, Pa.,	29 N Ed
Frederic Leopold Johnson,	Newark, N. J.,	P, U
George White Johnson,	Hackensack, N. J.,	30 U
Fred Mason Kinne,	Paterson, N. J.,	30 U
James Hanna Kurtz,	New Castle, Pa.,	
John Crist Landis,	Middletown, Pa.,	27 William St.
Nicholas Frederick Lenssen,	New York City,	34 N Ed
Burt Hayes Leonard,	Beaver, Pa.,	16 N E
Stacy Barcroft Lloyd,	Philadelphia, Pa.,	9 E W
Matthew Lowrie,	Warriorsmark, Pa.,	17 S W
William Frank McCombs,	Hamburg, Ark.,	9 S M R
Charles Lester McCoy,	Peoria, Ill.,	U, U
Herbert McDermott,	Chattanooga, Tenn.,	26 N Ed
James Wilson Mack,	Indiana, Pa.,	7 S M R
Robert McKelvy,	Titusville, Pa.,	6 E M W
Thomas Goodman McWilliams,	Chicago, Ill.,	12 W B
Wurtele Marston,	New York City,	16 U
Harry Oliver Martin,	Mifflintown, Pa.,	E, E B
Paul Curtis Martin,	Springfield, O.,	20 N E
Henry Everitt Mattison,	Brooklyn, N. Y.,	6 N R
Springer Harbaugh Moore,	Sewickley, Pa.,	6 M D
Milton Baldwin Morehouse,	East Orange, N. J.,	9 Park St.
Clifford Abbott Morton,	New Egypt, N. J.,	7 S Ed
Harold Bond Nason,	Philadelphia, Pa.,	112 Nassau St.
William E. Nicely,	Dayton, Ind.,	19 W W
Craig Elder Nightingale,	New York City,	20 E W
Harrington Spear Paine,	New York City,	4 N R
Harry Parsons,	Williamsport, Pa.,	6 E M W
John Macmillan Stevenson Patton,	Princeton, N. J.,	Prospect
Merle Newton Poe,	Findlay, O.,	31 William St.
Ezra Parmelee Prentice,	New York City,	1 E W

George Griffiths Reichner,	Philadelphia, Pa.,	C, U
Howard Roland Reiter,	Philadelphia, Pa.,	15 N Ed
Richard Frederick Lot Ridgway,	Cream Ridge, N. J.,	7 S Ed
William Moody Robb,	Amsterdam, N. Y.,	8 S W B
Philip Ely Robinson,	Sewickley, Pa.,	166 Nassau St.
John Henry Rodney, Jr.,	New Castle, Del.,	L, U
Addison Priest Rosenkrans,	Newton, N. J.,	29 Vandeventer Av.
James Wood Rusling,	Trenton, N. J.,	5 W W
Halsey Sayles,	New York City,	14 N E
Nathan Southwick Schroeder,	Brooklyn, N. Y.,	1 S E
John Matthew Scott,	Frankfort, Ky.,	8 E M W
Edmund Bayly Seymour, Jr.,	Germantown, Pa.,	18 U
Caleb Edgar Shreve,	Mount Holly, N. J.,	88 Vandeventer Av.
George Vivian Smith,	Lakewood, N. J.,	12 S D
Latimer Painter Smith,	Philadelphia, Pa.,	5 S D
Leon Stein,	Newark, N. J.,	29 Vandeventer Av.
Henry Mears Stevenson,	Philadelphia, Pa.,	8 Dickinson St.
James Franklin Supplee, Jr.,	Baltimore, Md.,	9 U
Frederick Judson Holden Sutton,	New York City,	10 S W
Joseph Simon Thomas,	Dunellen, N. J.,	74 U
Walter Thomas,	Milford, Del.,	1 N Ed
Samuel Garver Thomson,	Altoona, Pa.,	15 S W
Henry Vanderbilt Tulloch,	Washington, D. C.,	17 U
Wynant Davis Vanderpool,	Morristown, N. J.,	5 E W
Harry Budd Van Dusen,	Cranbury, N. J.,	38 S Ed
Lewis Harlow Van Dusen,	Philadelphia, Pa.,	11 & 12 U
James Edward Van Dyke,	Stockton, N. J.,	A, E B
Joseph Smith Van Dyke, Jr.,	Cranbury, N. J.,	A, E B
Frank Keely Watson,	Aldine, N. J.,	66 U
Benjamin Remington Weld,	Minneapolis, Minn.,	5 S M E
Harold Bertrand Wells,	Pemberton, N. J.,	21 N E
Albert Payson Williams, Jr.,	Frenchtown, N. J.,	3 S E
Meade Tyrrell Williams,	St. Louis, Mo.,	60 Univ. Pl.
Alexander Witherspoon,	Louisville, Ky.,	2 N W
Harvey Lee Wyatt,	Wilmington, Del.,	20 S W
Howard Herr Yocum,	Columbia, Pa.,	P, U

SOPHOMORES, ... 126

FRESHMAN CLASS.

John Warren Armitage, Newark, N. J., 187 Nassau St.
Alexander Armstrong, Jr., Hagerstown, Md., G, U
Robert Lynn Bachman, Jr., Utica, N. Y., 9 Park St.
John Henry Bawden, Freehold, N. J., 32 Vandeventer Av.
Wilson Thomas Moore Beale, Frederick City, Md., 32 Mercer St.
George Minthorne Bennett, Monticello, N. Y., 75 Prospect Av.
Howard Stephen Bennett, Hackettstown, N. J., 29 Vandeventer Av.
Albert Dock Bigler, Clearfield, Pa., 22 Dickinson St.
Thomas Dezelle Blair, Plainfield, N. J., 3 S E
Frederick Blanchard, Bellefonte, Pa., 9 Park St.
Henry Alford Bogga, Philadelphia, Pa., 27 William St.
Samuel Bowman Bope, Findlay, O., 23 William St.
John Curtis Borden, Manasquan, N. J., 66 Nassau St.
Donald Boyd, Fonda, N. Y., 33 Chambers St.
William Fairview Boyd, Lansdowne, Pa., 23 William St.
Ethelbert Ludlow Dudley Breckinridge, Washington, D. C., 10 Dickinson St.
Lucian Scott Breckinridge, Washington, D. C., 72 Univ. Pl.
Charles Henry Breed, Pittsburgh, Pa., 78 Univ. Pl.
John Rowe Brewer, Chambersburg, Pa., 76 Univ. Pl.
Alexander McDonald Brown, Cincinnati, O., 148 Nassau St.
Orville Graham Brown, Washington, D. C., 201 Nassau St.
Edwin Horace Bryan, Jr., Germantown, Pa., 4 S B
Horace Graham Butler, Blairstown, N. J., 28 Chambers St.
Walter Jenkins Campbell, New York City, 29 William St.
Norman McLeod Carter, Huntington, N. Y., 76 Univ. Pl.
John Hartford Chidester, Dobb's Ferry, N. Y., 45 Univ. Pl.
Reeve Chipman, Chicago, Ill., 11 Vandeventer Av.
Junius Paul Clark, Philadelphia, Pa., T, U
William Averill Cleland, Duluth, Minn., 215 Nassau St.
Francis Hopkinson Coffin, Phœnixville, Pa., 112 Nassau St.
John T. S. Collier, Paterson, N. J., 11 Dickinson St.
Harry Pollard Converse, Louisville, Ky., 23 Edwards Pl.
Horace Stuart Cory, Newark, N. J., 148 Nassau St.
Edwin Gordon Crowdis, N. E. Margaree, N. S., 2 S Ed
Edwin Ernest Curtis, Oil City, Pa., 92 Stockton St.
William Pratt Dale, Louisville, Ky., 36 Univ. Pl.

Edward Coleman Delafield, New York City, 17 N E
Robert Ernest Dismukes, Columbus, Ga., 33 Chambers St.
Louis Hays Dos Passos, New York City, 31 Univ. Pl.
Andrew Bradley Duvall, Jr., Washington, D. C., 58 Univ. Pl.
Henry Howard Ellison, Jr., Philadelphia, Pa., 9 S D
Conover English, Elizabeth, N. J., 24 Chambers St.
Walter Collins Erdman, Germantown, Pa., 2 S D
Edwin Fitzgerald Ferris, Pittston, Pa., 53 Univ. Pl.
Noel Bleecker Fox, Morristown, N. J., 53 Univ. Pl.
Charles Yoe Freeman, Denver, Col., 15 N W
Marshall Geer, Summit, N. J., 4 W M W
Joseph Chambers George, Mont Alto, Pa., 15 Univ. Pl.
Elmer Hendrickson Geran, Matawan, N. J., 64 Univ. Pl.
Edgar Marsh Gibby, Princeton, N. J., 194 Nassau St.
John Kyle Gordon, Fannettsburg, Pa., 60 Univ. Pl.
Charles Lee Hamilton, Louisville, Ky., 47 Univ. Pl.
Joseph Thornley Hanlon, Pennington, N. J., 61 U
Harold Charles Harmon, Hoosick Falls, N. Y., 1 N Ed
James Henry Harrison, Caldwell, N. J., 165 Nassau St.
William Elias Hedges, Chicago, Ill., 13 U
Harry Anderson Heilman, Kittanning, Pa., 32 Witherspoon St.
George Davis Hendrickson, Mt. Holly, N. J., 9 S R
William Edgar Heron, Chattanooga, Tenn., 33 Vandeventer Av.
Charles Henry Howe, Syracuse, N. Y., 76 Univ. Pl.
Samuel Culbertson Huey, Philadelphia, Pa., 10 Dickinson St.
Charles Laurance Humphrey, Towanda, Pa., 10 N
Elmer Ellsworth Schultz Johnson, New Berlinville, Pa., 30 Mercer St.
Robert Daniel Johnston, Jr., Birmingham, Ala., S, U
Oliver Dimon Kellogg, Vineland, N. J., 24 Chambers St.
Edwin Logan Kendall, New York City, 27 Mercer St.
George Busie Kennedy, Pittsburgh, Pa., B, U
Thomas Grady Kennedy, Covington, Ky., 44 Vandeventer Av.
Robert Barbee Kingsbury, East Orange, N. J., 12 M D
Joseph Needham Kinney, Pine Plains, N. Y., 172 Nassau St.
Norman Elias Koehler, Kingston, Pa., 19 S M R
Maxwell Hillegass Kratz, Philadelphia, Pa., 30 Mercer St.
William Trowbridge Laing, Sacramento, Cal., 20 W W
Carl Haynes Langenberg, St. Louis, Mo., 41 Univ. Pl.

Otho Scott Lee, Jr., Belair, Md., 71 U
Henry Bertram Lewis, Germantown, Pa., 112 Nassau St.
George Heyser Light, Bedington, W. Va., 64 Univ. Pl.
Samuel Negley Loose, Hagerstown, Md., 86 Univ. Pl.
Edward Daland Lovejoy, Philadelphia, Pa., 47 Univ. Pl.
Martin Kerr McCullagh, Worcester, Mass., 11 Dickinson St.
William Calder McGibbon, Jr., New York City, 15 Dickinson St.
James Allan Mackenzie, San Francisco, Cal., 172 Nassau St.
Watson Marshall, Pittsburgh, Pa., 192 Nassau St.
Harrie Breneman Martin, Springfield, O., 20 N E
William Smith Miles, Peoria, Ill., U, U
Victor Davis Miller, Jr., Mason and Dixon, Pa., G, U
Herbert Francis Mitchell, Passaic, N. J., 86 Univ. Pl.
Samuel Moore, Trenton, N. J., 3 S W
Henry Seymour Mudge, Princeton, N. J., 1 E B
Edward Thompson Newton, Jalandhar, India, 28 Chambers St.
James Lawson Norris, Jr., Washington, D. C., 89 Nassau St.
Percy Elliot North, Carbondale, Ill., 10 E B
James Henry Northrup, Augusta, N. J., 5 S Ed
Harry Zebulon O'Brien, Clarksboro, N. J., 23 William St.
Harry Keppele Bunting Ogle, Philadelphia, Pa., 80 Mercer St.
Clarence Henry Parker, Freehold, N. J., 8 S M R
Henry Blackiston Patton, Philadelphia, Pa., 15 Univ. Pl.
George Elliott Peebles, Pittsburgh, Pa., 86 Univ. Pl.
William Black Pell, New York City, 25 M D
Elias Eckfeldt Perkins, Chester, Pa., 89 Nassau St.
Albert Halsey Pierson, East Orange, N. J., 47 Univ. Pl.
John Gould Ralston, Chicago, Ill., 19 Univ. Pl.
George Kinner Reed, Newville, Pa., 6 S R
Nathaniel Smith Reeves, West Brooklyn, N. Y., 62 Canal St.
John McLaren Richardson, Geneva, N. Y., 167 Nassau St.
William Scheerer Roe, Newark, N. J., 41 Univ. Pl.
Edward Montgomery Rogers, St. Louis, Mo., 41 Univ. Pl.
Jonathan Causby Royle, Salt Lake City, Utah, 82 Mercer St.
George Jeffrey Russell, Montclair, N. J., 168 Nassau St.
William Magill Schultz, Danville, Pa., 11 Dickinson St.
Edgar Clarence Sheppard, Tuckahoe, N. J., 29 Vandeventer Av.
Walter Sidebottom, Germantown, Pa., 22 Dickinson St.
William Joseph Slidell, Princeton, N. J., 74 Bayard Av.

Raymond Wood Smith,	Newark, N. J.,	85 Univ. Pl.
Robert Hamilton Southard,	Brooklyn, N. Y.,	172 Nassau St.
Horatio Nelson Spencer,	St. Louis, Mo.,	64 Univ. Pl.
William Wagner Staake,	Philadelphia, Pa.,	81 Univ. Pl.
James Gardner Stevenson,	Brooklyn, N. Y.,	1 S E
Douglas Bruen Stewart,	New York City,	53 Univ. Pl.
Luther Milton Strayer,	Princeton, N. J.,	30 Mercer St.
Edward Blair Sutphen,	Newark, N. J.,	19 Univ. Pl.
Lewis Smith Thomas,	Dunellen, N. J.,	74 U
Francis Simms Troutman,	Louisville, Ky.,	50 U
Charles Rusling Uhle,	Blairstown, N. J.,	78 Univ. Pl.
Cyrus Hamlin Vail,	Blairstown, N. J.,	78 Univ. Pl.
James Moncur Vincent,	Hamilton, Can.,	11 N M E
Garrett S. Voorhees,	Princeton, N. J.,	33 Chambers St.
Frank Corey Voorhies,	Woodbury, N. J.,	43 Vandeventer Av.
Leslie Perry Ward,	Newark, N. J.,	16 S W
Richard Webster,	Islip, N. Y.,	75 Prospect Av.
Alfred Sewall Weston,	Hammonton, N. J.,	18 N Ed
Max Charles John Wiehle,	Washington, D. C.,	88 Nassau St.
Russell Douglas Wilson,	Cincinnati, O.,	22 Dickinson St.
Jay Ralph Woodcock,	Bellefonte, Pa.,	9 Park St.
Fred Young,	Southampton, Eng,	18 S M E

FRESHMEN, ... 135

SPECIAL STUDENTS.

Harry William Bloch,	Philadelphia, Pa.,	21 S Ed
Ernest Alexander Boeckh,	Atlanta, Ga.,	78 Univ. Pl.
Percy Adelbert Caldwell,	Chattanooga, Tenn.,	17 W W
Samuel Clay,	Paris, Ky.,	8 S W
Joseph Wardell Conrow,	Long Branch, N. J.,	9 M D
Frank Linley Critchlow,	Manchester, Eng.,	188 Nassau St.
Roy Paul Miller Davis,	Steubenville, O.,	78 Univ. Pl.
Russell Eugene Dexter,	Philadelphia, Pa.,	29 Vandeventer Av.
Gustav Eggena,	New Brighton, N. Y.,	V, U
Anthony Henderson Euwer,	Ben Avon, Pa.,	23 N E
Frank Edgar Evans,	Milwaukee, Wis.,	33 U

Edgar Halliday,	Brooklyn, N. Y.,	27 N E
Herbert Stephen Harrison,	Jersey, O.,	6 N M R
James Hayes, Jr.,	Plainfield, N. J.,	27 Mercer St.
Sharon P. Heilman,	Kittanning, Pa.,	9 N M R
William Henry Hoole,	Buffalo, N. Y.,	8 N M R
Arthur March Kennedy,	Philadelphia, Pa.,	2 M D
Francis Marschalk Kip, Jr.,	Harlingen, N. J.,	
Robert Ogilvie Kirkwood,	Yonkers, N. Y.,	2 N Ed
Frederic Hinton Maule,	Philadelphia, Pa.,	5 S R
George Williams Peck, Jr.,	Roselle, N. J.,	5 N R
Micajah Wallace Pope,	Annapolis, Md.,	40 U
Oscar Bertram Riegel,	Orwigsburgh, Pa.,	7 N R
George Barcley Rives,	New York City,	2 N D
Robert Dalzell Schoonmaker,	Plainfield, N. J.,	10 S W B
James Harvey Scott,	Pittsburgh, Pa.,	1 W W
Enos Ray Simons,	Maud, Pa.,	175 Nassau St.
Herman Milton Suter,	Greensburg, Pa.,	4 Edwards Pl.
Frederick Ridgely Torrence,	Xenia, O.,	88 S Ed
Ernest Ely Turney,	Grand Rapids, O.,	42 N Ed

ACADEMIC SPECIALS, ... 30

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STUDENTS IN THE JOHN C. GREEN SCHOOL OF SCIENCE.

SCHOOL OF ELECTRICAL ENGINEERING.

John Hall Bowman, A.B., Princeton, 1895.	Plainfield, N. J.,	1 S M R
Walter Raines Darby, A.B., Princeton, 1895.	Plainfield, N. J.,	3 S M R
James Edward Hayes, Jr., C.E., Princeton, 1895.	Brooklyn, N. Y.,	40 Nassau St.
Andrew Reid McNitt, A.B., Princeton, 1895.	Siglerville, Pa.,	25 N Ed
Anderson Offutt, B.S., Princeton, 1895.	Rockville, Md.,	5 N W
Frank Forrester Thompson, A.B., Princeton, 1894; A.M., 1895.	Milroy, Pa.,	11 N Ed
Robert Lansing Zabriskie, A.B., Princeton, 1895.	Aurora, N. Y.,	12 S E

STUDENTS IN THE ELECTRICAL SCHOOL, ... 7

SENIOR CLASS.

e George Klots Allen, Jr.,	Red Bank, N. J.,	2 E W
a Hugh Wilson Barnett,	Springfield, O.,	10 N W
e George Glover Blackmore,	Cincinnati, O.,	7 N W
e Edgar Thomas Blackwell,	Hopewell, N. J.,	88 Nassau St.
e Arthur Houston Brown,	Des Moines, Ia.,	13 N
a William Bush,	Wilmington, Del.,	5 S W B
a Roderick Byington, Jr.,	Brooklyn, N. Y.,	14 S E
a Walter Chandler, Jr.,	Elizabeth, N. J.,	4 E B
a Logan Coleman,	Springfield, Ill.,	41 U
e Henry Haines Cross,	Mt. Holly, N. J.,	9 S E
a George Goodwin Dewey,	Portsmouth, N. H.,	18 M D
a William Sutton Dickson,	Pittsburgh, Pa.,	5 N E
e James Henry Emlen,	Trenton, N. J.,	58 John St.

a Emory Leyden Ford, Allegheny, Pa., 12 N W
e William Hager, St. Louis, Mo., 15 N D
e John Hanlon, Brooklyn, N. Y., 81 Vandeventer Av.
a William Prettyman Hearn, Philadelphia, Pa., 2 S E
e Christian Stanger Heritage, Glassboro, N. J., 8 S E B
e Alfred Bloomfield Jones, Mt. Holly, N. J., 7 N M R
a Percy Ogden Judson, East Arlington, Vt., 2 U
e John Douglas Kilpatrick, Baltimore, Md., 7 E M W
a Edwin Edward Kurtzeborn, St. Louis, Mo., 88 U
a Frederick Curwen Leas, Philadelphia, Pa., 8 N R
e Thomas Dimock Leonard, Syracuse, N. Y., 16 M D
a Welding Dennis Libbey, New York City, 64 & 65 U
e William Thomas Lyle, Newark, N. J., 5 S E
a George Wood Lyon, Bridgeton, N. J., 4 N E
a Charles Ingalls Marvin, Germantown, Pa., 12 S E B
e William Galbraith Mitchell, Washington, D. C., 1 E M W
a Harold Byron Northrup, Johnstown, N. Y., 14 S E
a Frederick Dalton Parker, Fostoria, O., 18 S M R
a William Bowne Parsons, Flushing, N. Y., 10 N M R
e Albert Irving Payne, Sayville, N. Y., 22 N Ed
a Arthur Edmund Pew, Pittsburgh, Pa., 20 M D
a William Woodburn Potter, Philadelphia, Pa., 5 W B
e William Belden Reed, Jr., New York City, 6 W M W
a Algernon Brooke Roberts, Bala, Pa., 11 S D
a Henry Welsh Rogers, Philadelphia, Pa., E, U
e George Rosengarten Sinnickson, Philadelphia, Pa., 14 & 15 U
e Lloyd Llewellyn Smith, Asbury, N. J., 18 N E
a Ralph Dusenbury Smith, Binghamton, N. Y., 18 E W
e Francis Gray Stewart, New York City, 21 Prospect Av.
a George Dawes Van Arsdale, Newark, N. J., 18 S E
a Arthur Ledlie Wheeler, Philadelphia, Pa., 10 M D
a Charles Hallock Whitehead, Kansas City, Mo., 6 S W
a Arthur Edward Winter, Orange, N. J., 64 & 65 U

SENIORS, ... 46

JUNIOR CLASS.

e Calvin Tomkins Allison, Stony Point, N. Y., 20 S W
a Owen Randolph Altman, California, Pa., 17 N Ed
a Harry Vanderburgh Babcock, New York City, 64 Univ. Pl.

a Edward Duff Balken,	Pittsburgh, Pa.,	6 S W B
a Henderson Barkley,	New Orleans, La.,	7 W M W
a Paul Bedford,	Wilkes Barre, Pa.,	7 E W
a Henry Hannah Bergen,	Brooklyn, N. Y.,	2 N D
e Henry Conklin Bissell,	Pennington, N. J.,	22 Dickinson St.
a Burdette Leon Bowne,	Grand Rapids, Mich.,	10 U
e Oscar Irwin Brown,	New York City,	7 N R
a Carl Emerson Buckingham,	Longmont, Col.,	24 Mercer St.
e Robert Stuart Campbell,	Lancaster, Pa.,	23 N Ed
e John Simmons Collette,	Binghamton, N. Y.,	13 N M R
e David Mahon Craig,	Washington, D. C.,	5 S W B
e Edward Parsons Davis,	Falmouth, Mass.,	9 S E B
e John De Gray,	Hawthorne, N. J.,	8 M D
a Evaristo Visente de Montalvo,	New York City,	9 S E B
e John Dean Elliott,	Allegheny City, Pa.,	42 U
e Walter Shipman Ely,	Peekskill, N. Y.,	5 E M W
a George Ostrum Forbes,	Rockford, Ill.,	2 E B
a Harvey Thompson Frazer,	Newark, N. J.,	1 M D
a Robert Garrett, Jr.,	Baltimore, Md.,	8 N D
a Nelson William Gillespie,	Scranton, Pa.,	22 M D
e Daniel Rouse Bower Glenn,	Princeton, N. J.,	15 Dickinson St.
e Henry Alexander Harris,	Princeton, N. J.,	256 Nassau St.
a William Elliott Harrold,	Americus, Ga.,	4 N D
a Francis Reynolds Haussling,	Newark, N. J.,	6 N D
e John Harrison Hutchinson,	Georgetown, N. J.,	10 N R
e Thomas Hall Ingham,	Philadelphia, Pa.,	20 N W
a Albert Woodward Jamison,	Peoria, Ill.,	27 M D
a Herbert Brotherson Jamison,	Peoria, Ill.,	27 M D
e Phillips Jones,	Newark, N. J.,	4 W B
a Edward Gruet Kent,	East Orange, N. J.,	11 S M R
a Carlton Montgomery Kershow,	Philadelphia, Pa.,	16 E W
e William White Knapp,	Peekskill, N. Y.,	5 E M W
e Harry Wells Leigh,	Princeton, N. J.,	186 Nassau St.
e Robert Theodore Leipold,	Washington, D. C.,	15 S E
e George Green Lewis,	Trenton, N. J.,	6 W W
a Frederic Brownell McNish,	Cambridge, N. Y.,	14 S D
a James Henry Masson, Jr.,	Mobile, Ala.,	15 S D
e Edwin Moore,	Moore, Pa.,	9 W B
a Robert Moore,	Pittsburgh, Pa.,	17 S E

e William Joseph Parker,	Trenton, N. J.,	10 N R
e Gaston Pearson Philip,	Claverack, N. Y.,	1 E M W
a Walter James Pilling,	Washington, D. C.,	11 W W
e Robert Pitcairn, Jr.,	Pittsburgh, Pa.,	2 E B
e John Reilly, Jr.,	Philadelphia, Pa.,	8 S D
a James Mauran Rhodes, Jr.,	Ardmore, Pa.,	16 W W
a Thomas Dudley Riggs,	Baltimore, Md.,	7 W M W
a Harry Curtis Robb,	Newark, N. J.,	18 S E
a Irving Livingston Roe,	New York City,	2 S E B
a Albert Huntsman Rosengarten,	Philadelphia, Pa.,	15 S D
a Joseph Wright Ryle,	Paterson, N. J.,	35 U
a Edwin Shortz, Jr.,	Wilkes Barre, Pa.,	8 W B
e Frederick Lorenzo Smith,	New York City,	9 N Ed
e Sydney Wentworth Taylor, Jr.,	Fort Riley, Kan.,	10 W B
a Leland Burr Terry,	Randolph, N. Y.,	8 N R
a John Myers Townley,	Kansas City, Mo.,	19 E W
a William Booth Trainer,	Chester, Pa.,	8 S W B
a Henry Waterhouse, Jr.,	Honolulu, Hawaiian Islands,	6 W B
a Robert Crew Wilkins,	Washington, D. C.,	10 N R
e Herbert Roland Woodward,	Peoria, Ill.,	7 E B

JUNIORS, ... 62

SOPHOMORE CLASS.

a Houston Churchwell Armstrong,	Selma, Ala.,	11 N E
a Matthew Baird,	Merion Sta., Pa.,	35 Univ. Pl.
a Charles Preston Beistle,	Swarthmore, Pa.,	75 Prospect Av.
a Ralph Waldo Beymer,	Corning, Ia.,	4 N Ed
a Moses Bigelow, Jr.,	Newark, N. J.,	36 Univ. Pl.
e George Harold Bouton,	Jersey City, N. J.,	49-50 U
e Robert Stewart Brooks,	Paterson, N. J.,	29 S Ed
a George Elsworth Brower,	Brooklyn, N. Y.,	9 N D
a Thomas Townsend Buckley,	New York City,	Princeton Inn
a George Howard Butler,	Brooklyn, N. Y.,	168 Nassau St.
a Williams Biddle Cadwalader,	Philadelphia, Pa.,	19 M D
e Harold Whitney Canning,	Wilmington, Del.,	32 U
e Garrett Cochran,	Williamsport, Pa.,	8 E M W
e Albert Emerson Comstock,	White Plains, N. Y.,	14 S Ed
a Wilbur Halstead Condon,	Oswego, Kan.,	206 Nassau St.

e William Leigh Cook, Princeton, N. J., 192 Nassau St.
a Edward Payson Cooke, Paterson, N. J., I, U
a Oakley Watts Cooke, Paterson, N. J., I, U
a Roy Cummings Cooper, Allegheny, Pa., 14 Vandeventer Av.
e Eugene Theodore DeWitt, Deckertown, N. J., 27 William St.
a Wallace DeWitt, Fort Leavenworth, Kan., 31 Steadman St.
a Philemon Dickinson, Trenton, N. J., 7 N D
a Bertrand Francis Drake, Yalaha, Fla., D, U
e Roswell Francis Easton, Princeton, N. J., 47 Univ. Pl.
a Myron Whitney Farlin, Chicago, Ill., 86 Nassau St.
a Theodore Weems Forbes, Baltimore, Md., 66 Nassau St.
a Holton Wesley Garner, Ottumwa, Ia., 28 S Ed
e Charles Sutter Gaskill, Mt. Holly, N. J., 7 S E B
e Guy Beall Gilmore, Uniontown, Pa., 19 S W
e Robert Galt Goldsborough, Baltimore, Md., 86 Nassau St.
a Franz Carl Gross, San Antonio, Tex., 11 W B
a Richard George Hager, St. Louis, Mo., 15 N D
a Harrison Hall, Dayton, O., 13 N W
e Harry Maybin Hart, Philadelphia, Pa., 7 S D
e Sterling Paine Hayward, Yonkers, N. Y., 31 U
e Edward Creswell Heald, Washington, D. C., 5 S B
a Walter Richmond Herrick, Albany, N. Y., 67 Prospect Av.
a James Rowland Hughes, Richmond, Ind., 75 U
e John Updegraff Hussey, Allegheny, Pa., 9 M D
e Joseph Baldwin Hutchinson, Jr., Philadelphia, Pa., 4 W W
e Richard Howard Jamison, Greensburg, Pa., 9 W M W
a John Samuel Jessup, Jr., Woodbury, N. J., 1 S E B
e John Johnston, Jr., Chicago, Ill., 86 Nassau St.
a Addison Wiley Kelly, New York City, 62 U
e Frank Weyman Kennedy, Allegheny, Pa., 9 M D
e Henry Hutton Kennedy, Jr., Philadelphia, Pa., 4 S E B
a Robert Burns King, Pittsburgh, Pa., 16 S E
a Samuel Victor King, Allegheny, Pa., 12 S W B
a Levin Dirickson Laning, Petersburg, Ill., 3 S B
a Milton Floyd Loofbourrow, Mt. Sterling, O., 66 Nassau St.
a George Henry McFarland, Jr., Cambridge, N. Y., 1 S B
a Albert Elliott McVitty, Bryn Mawr, Pa., 2 W M W
a Edward Quinby McVitty, Bryn Mawr, Pa., 2 W M W
a Clinton Vanderbilt Meserole, Brooklyn, N. Y., 60 U

a Oliver Samuel Metzerott, Washington, D. C., 75 U
a George McCague Newmyer, Pittsburgh, Pa., 206 Nassau St.
e James Caldwell Park, Cranford, N. J., 68–69 U
a John Reid Parker, Freehold, N. J., 8 S M R
a Edward Franklin Pelton, Brooklyn, N. Y., 11 S E B
e Frank Russel Pitcairn, Harrisburg, Pa., 70 U
a Charles Morgan Post, Brooklyn, N. Y., 11 S E B
a Harry Clay Potter, Jr., Philadelphia, Pa., 5 N W B
a Frank Ferry Powell, Cincinnati, O., 33 N Ed
e Seth Jagger Raynor, Southampton, N. Y., 3 Edwards Pl.
a Charles Carter Renshaw, Boyce, Va., 3 U
e William Rollinson, Orange, N. J., R, U
e William Bernard Schwarz, Baltimore, Md., 86 Nassau St.
a William McKendree Scott, Allegheny, Pa., 56 Bayard Av.
a Howard Eves Seaver, Philadelphia, Pa., 2 W B
e Lansing Skimmerhorn Seymour, Pittsburgh, Pa., 16 S E
a Archer Coit Sinclair, New York City, 12 S E B
e Thomas Julien Skillman, Trenton, N. J., 7 N W
e Harold Perry Smith, Nyack, N. Y., 11 W B
a Richard Lawrence Smith, New York City, 68 Univ. Pl.
a William Hair Spurgin, West Point, N. Y., F, W B
e Walter Patterson Stewart, Saltsburg, Pa., 16 S M R
a Paul Devereux Stockly, Lakewood, N. J., 2 S E B
e Raleigh Colston Thomas, Baltimore, Md., 4 W W
a Payson Thompson, Chicago, Ill., 2 Witherspoon St.
a Raymond Boyd Thompson, New York City, 9 W M W
e John Bradford Van Valkenburgh, Albany, N. Y., 192 Nassau St.
e Hay Walker, Allegheny, Pa., 12 S W B
e Clinton Glencairn Wells, Galveston, Tex., 40 Vandeventer Av.
a Charles Tilden Westcott, Chestertown, Md., 9 N E
a Edward Frederick Wetzel, Oak Park, Ill., 11 N E
a Richard Charles Wigton, Philadelphia, Pa., 10 S R
e Ernest Wyckoff, Hightstown, N. J., 2 S M R

SOPHOMORES, ... 87

FRESHMAN CLASS.

e Louis Robert Albright, Allentown, Pa., 27 Chambers St.
e Eugene Yorke Allen, South Orange, N. J., 9 E M W

e William Jules Aman, Washington, D. C., 138 Nassau St.
e Abram Crittendon Ayres, New York City, 6 W M W
a Frank Woods Bailey, Pittsburgh. Pa., 11 Vandeventer Av.
a John Baird, Haverford, Pa., 81 Univ. Pl.
a Fred DeMerritte Barker, Ebensburg, Pa., 217 Nassau St.
a Bruce Bedford, Wilkes Barre, Pa., 7 E W
a Edwin North Benson, Jr., Philadelphia, Pa., 7 N D
a Bertram Dukes Blyth, Englewood, N. J., 8 E B
a Walter Murray Brenner, Dayton, O., 11 Dickinson St.
a Edward Allen Breck, Pittsburgh, Pa., 9 Park St.
e Adelbert Emmons Bronson, Jr., Cleveland, O., 22 Dickinson St.
a Philip Edwin Brundage, Stroudsburg, Pa., 109 Canal St.
a Chauncey Howard Burt, Plainfield, N. J., 12 Vandeventer Av.
e Raymond Hastings Alleyne Carter, Montclair, N. J., 22 Stockton St.
e Robert Gordon Chappelle, Galesburg, Ill., 28 Edwards Pl.
a Edwin Truesdell Clark, Dayton, O., 3 M D
a James Henry Colfelt, Exton, Pa., 47 Univ. Pl.
a George Leonard Collard, Pittsburgh, Pa., 36 Univ. Pl.
a David Shields Cook, Jr., Evanston, Ill., 88 Nassau St.
a Raymond Scudder Cook, Lawrenceville, N. J., 192 Nassau St.
e Archie Bedell Crooks, Newark, N. J., 44 Vandeventer Av.
e Bryant Sterling Daniels, Covington, Ky., 148 Nassau St.
a Robert Stewart Davis, Milton, Pa., 22 Edwards Pl.
a John Hall Deane, Jr., New York City, 48 Vandeventer Av.
e William Henry Detrich, Markes, Pa., 27 Chambers St.
a Edward Hempstead Dickinson, Chicago, Ill., 47 Univ. Pl.
a Keith Donaldson, Philadelphia, Pa., 81 Univ. Pl.
a Ernest Rickeard Dunn, Germantown, Pa., 73 U
a John B. Edgar, Chambersburg, Pa., 45 Univ. Pl.
a Frank Parker Ekings, Paterson, N. J., 12 Dickinson St.
a Robert Potter Elmer, Bridgeton, N. J., 4 N M B
e John Andrews Ely, Jr., New York City, 240 Nassau St
a Harry Griest Euwer, New Castle, Pa., 4 N W
a Howard McClure Fair, Blairsville, Pa., 1 S Ed
a Richard Hanenkamp Fallon, Chicago, Ill., 11 Edwards Pl.
e Frank Arthur Ferris, Jr., South Norwalk, Conn., 64 Univ. Pl.
a Robert Sanford Foster, Indianapolis, Ind., 13 N D

a Mortimer Bartine Fuller, Scranton, Pa., 31 Univ. Pl.
e Thomas Franklin Galt, St. Louis, Mo., 72 Univ. Pl.
a Francis Colquhoun Goldsborough, Baltimore, Md., 86 Nassau St.
a Frank Duncan Graham, Seabright, N. J., 80 Princeton Inn
a Charles Black Gray, Wilmington, Del., 50 Nassau St.
a Chester Griswold, Jr., New York, N. Y., Princeton Inn
a Bryan Chedister Guerin, Morristown, N. J.,
a Leonard Kent Guiler, Pittsburgh, Pa., 33 Univ. Pl.
a William McDowell Halsey, Jr., Mount Vernon, N. Y., 1 Edwards Pl.
a Dwight Story Harding, Evanston, Ill., 24 M D
a Charles Albert Hatch, Stamford, Conn., 19 Univ. Pl.
a Ralph Woodward Hayden, Evanston, Ill., 88 Nassau St.
e Franklin Milo Hill, Princeton, N. J., Infirmary
e Cleaveland Hilson, Jr., Trenton, N. J., 15 S Ed
a Frank Hackett Humphrey, St. Louis, Mo., 31 Univ. Pl.
e Isaac Harrison Hutchinson, Georgetown, N. J., 10 N R
a Henry F. Askew Jackson, Wilmington, Del., 168 Nassau St.
a Livingston Erringer Jones, Germantown, Pa., 47 Univ. Pl.
e Murray Frederic Kelley, Racine, Wis., 11 Dickinson St.
a George Knowles Large, Flemington, N. J., 86 Univ. Pl.
a George Frederick Lazarus, Wilkes-Barre, Pa., 53 Univ. Pl.
a Francis Cabeen Lea, Philadelphia, Pa., 18 & 19 W W
a Henry Dunlap Lloyd, St. Louis, Mo., 39 Univ. Pl.
a Howard Logan, Springfield, Ill., 167 Nassau St.
a James Nance McCaughrin, Newberry, S. C., 39 Univ. Pl.
e John Thompson McKennan, Pittsburgh, Pa., 24 Chambers St.
a Edward Charles McWilliams, Wilkes-Barre, Pa., 88 Nassau St.
a Samuel Klump Martin, Jr., Chicago, Ill., 53 Univ. Pl.
a Joseph Dennie Meredith, Morristown, N. J., D, U
e James Bennett Milliken, Pottsville, Pa., 15 Dickinson St.
e Edward Sewall Mitchell, Glen Ridge, N. J., 172 Nassau St.
a Mark Moody, Webster Groves, Mo., 12 Vandeventer Av.
e William Thompson Morgan, Trenton, N. J.
e Edgar West Nicholson, Philadelphia, Pa., 10 Dickinson St.
a Henry Hildreth Pease, Wilkes-Barre, Pa., 31 Univ. Pl.
a Bishop Chapin Perkins, Washington, D. C., 4 E M W
a Edgar Morris Phelps, New Rochelle, N. Y., 88 Nassau St.

a John Harris Briggs Phillips, Allegheny, Pa., 86 Univ. Pl.
a Charles Rogers Pierce, St. Louis, Mo., 81 Univ. Pl.
a William Dixon Quackenbush, Paterson, N. J., 12 Dickinson St.
a James Lardner Reakirt, Philadelphia, Pa.,
a Thomas William Roberts, Bala P. O., Pa., 11 S D
e Louis Adams Robb, Newark, N. J., 28 William St.
a Ralph Root, East Orange, N. J., 31 Univ. Pl.
a Frederic Rosengarten, Philadelphia, Pa., 31 Univ. Pl.
a Archibald Hamilton Rowan, Irvington, N. Y., 32 Vandeventer Av.
e Fred Wesley Salmon, Mt. Olive, N. J., 78 Univ. Pl.
e Eads Everhart Schmidt, Princeton, N. J., 294 Nassau St.
e William Parr Scott, Germantown, Pa., 39 Nassau St.
e Ralph Wilson Simonds, Newark, N. J., 148 Nassau St.
a Burrows Sloan, Philadelphia, Pa., 47 Univ. Pl.
a Frank Lawrence Stratton, New York City, 3 S W B
a Harry Street, Brooklyn, N. Y., 44 Vandeventer Av.
e William Harris Tantum, Jr., Worcester, Mass., 15 Dickinson St.
a Andrew Thompson, Albany, N. Y., 67 Prospect Av.
a William Whitehead Titus, Trenton, N. J., 11 N D
e Herbert Norris Twells, Woodbury, N. J., 47 Univ. Pl.
a William Leigh Ulyat, Princeton, N. J., 93 Canal St.
a Walter Lyman Upson, Cleveland, O., 15 N M B
a Francis King Wainwright, Philadelphia, Pa., 86 Univ. Pl.
a Wilmer Waldo, Houston, Tex., 78 Univ. Pl.
a William Miller Wardrop, Sewickley, Pa., 39 Nassau St.
a Perry Wentz, Drifton, Pa.,
a John Logan Wilson, Pittsburg, Pa., 14 Vandeventer Av.
a Smith Palmer Wood, Saginaw, Mich., 15 Dickinson St.
a Joshua Butler Wright, Morristown, N. J., 53 Univ. Pl.
e William Wallace Young, Bordentown, N. J., 60 Univ. Pl.

FRESHMEN, ... 106

SPECIAL STUDENTS.

James Belmont Allen, Kansas City, Mo., 19 E W
William Heath Bannard, Long Branch, N. J., 66 Nassau St.
William S. Baylis, Englewood, N. J., 10 N D

Howard Beattie,	Little Falls, N. J.,	3 E B
Henry Clayton Blackwell,	Trenton, N. J.,	1 U
Parker Johnson Boice,	Indianapolis, Ind.,	13 N D
James Alexander Bond,	Westminster, Md.,	168 Nassau St.
William Erasmus Bottger,	Utica, N. Y.,	25 S Ed
Bernis Brien,	Dayton, O.,	13 N W
Harry Agnew Bubb,	Williamsport, Pa.,	5 W W
Lee Monroe Byrnes,	St. Louis, Mo.,	41 Univ. Pl.
Henry Beam Campbell,	Carbondale, Ill.,	10 E B
Stewart Fellowes Campbell,	Glen Ridge, N. J.,	10 S W
Paul David Clark,	Dayton, O.,	19 S W
James King Clarke,	Pittsburgh, Pa.,	14 W W
Henry Steiner Clement, Jr.,	Saratoga, N. Y.,	M, U
William Douglass Collins,	St. Louis, Mo.,	9 N E
Alexander Coulter,	Greensburg, Pa.,	1 N D
Archibald Deming Davis,	Lakewood, N. J.,	19 Univ. Pl.
Murray Greene Day,	Morristown, N. J.,	16 S W
Ralph Derr,	Wilkes Barre, Pa.,	8 W B
Ralph Vance Dickerman,	Springfield, Ill.,	72 U
George Carleton Dominick,	Englewood, N. J.,	15 Univ Pl.
William Wilson Drake,	New York City,	31 Canal St.
John Thomas Dunlop,	Washington, D. C.,	10 S E
Frank Evans,	Blairsville, Pa.,	3 M D
John Edmund Jones Fanshawe,	Germantown, Pa.,	89 Nassau St.
Albert Cooley Fulton,	Elmira, N. Y.,	17 S M E
George James Geer, Jr.,	Summit, N. J.,	4 W M W
James Williams Gidley,	Whitewood, S. Dak.,	47 Univ. Pl.
Joseph Graham Witherspoon Goldthwaite, Jr.,	Galveston, Tex.,	11 Edwards Pl.
Eben Slote Goodwin,	Kane, Pa.,	45 Univ. Pl.
Ferdinand Johnson Graves,	Germantown, Pa.,	12 U
John Leigh Green,	St. Louis, Mo.,	9 S W B
Arthur Gunster,	Scranton, Pa.,	8 S E B
Arthur Herbert Hagemeyer,	S. Orange, N. J.,	16 W W
Louis Williams Hall, Jr.,	Harrisburg, Pa.,	8 E M W
Alfred Hamburger,	Allegheny, Pa.,	3 E B
Edwin Hammett,	Germantown, Pa.,	9 S W B
Charles Chanteau Henshaw,	St. Louis, Mo.,	9 S W B
Charles Herndon,	Tyler, Tex.,	29 N Ed
Jesse Dilley Jones,	Wilkes Barre, Pa.,	6 S W

Henry Neff Kehler, Jr.,	Columbia, Pa.,	8 S W B
Richard Browning Kent,	Jersey City, N. J.,	10 W B
Kenneth Raleigh Kingsbury,	E. Orange, N. J.,	12 M D
Lewis Knapp,	St. Louis, Mo.,	33 U
Langdon Lea,	Philadelphia, Pa.,	23 M D
Henry Wheeler Lowe,	Plainfield, N. J.,	5 M D
Walter McClenahan,	Port Deposit, Md.,	2 W M W
Richard Philip McGrann,	Lancaster, Pa.,	9 W W
Guy Boutwell McKinney,	St. Joseph, Mo.,	30 Mercer St.
Roderick Lachlan Macleay,	Portland, Or.,	5 M D
Maurice Beekman McMillan,	Detroit, Mich.,	7 S D
Duncan Macphee,	Trenton, N. J.	
Andrew Mills, Jr.,	New York City,	7 S W B
Dudley Burnham Munger,	Kansas City, Mo.,	12 E B
Charles Monroe Murray,	Albany, Tex.,	17 Canal St.
Malcolm Stewart Murray,	Saltsburg, Pa.,	16 S M R
Herbert LeRoy Pitkin,	Englewood, N. J.,	39 Univ. Pl.
Frank DeWitt Pitkin,	Yonkers, N. Y.,	4 U
Neilson Poe, Jr.,	Baltimore, Md.,	5 W M W
Arthur Pomeroy,	Cleveland, O.,	22 Dickinson St.
Garrett Lloyd Reilly,	Philadelphia, Pa.,	3 S D
Carl Hamilton Rickey,	Trenton, N. J.,	11 N D
Leonard Harman Robbins,	Lincoln, Neb.,	173 Nassau St.
Lee Moses Rumsey,	St. Louis, Mo.,	3 N D
Ira Allan Sankey,	Brooklyn, N. Y.,	14 S W
William Henry Schoonmaker,	Pittsburgh, Pa.,	5 N R
George Cole Scott,	Richmond, Va.,	36 Univ. Pl.
Charles Edward Speer, Jr.,	Pittsburgh, Pa.,	35 Univ. Pl.
Alexander Mead Stewart, Jr.,	Indiana, Pa.,	2 N R H
Walter Clark Titus,	Trenton, N. J.,	11 N D
Horatio Whitridge Turnbull,	Baltimore, Md.,	16 M D
John Stout Van Nest,	Trenton, N. J.,	7 N E
Robert Weber,	New York City,	6 W M W
Charles Gordon Wiestling,	Vandalia, Ill.,	164 Nassau St.
Lewis Noble Wiggins,	Springfield, Ill.,	3 S E
Elias Alvah Wilkinson,	Newark, N. J.,	6 N D
Benjamin Gardner Wilson,	Clarion, Pa.,	8 W M W
Walter Winfield Wilson,	Clarion, Pa.,	8 W M W

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CLASSIFICATION OF STUDENTS BY RESIDENCE.

Pennsylvania	307	Vermont	3
New Jersey	249	Wisconsin	3
New York	165	North Carolina	2
Ohio	47	Oregon	2
Illinois	37	South Dakota	2
Maryland	36	West Virginia	2
Missouri	32	Arkansas	1
District of Columbia	27	Florida	1
Kentucky	19	Indian Territory	1
Indiana	16	Louisiana	1
Iowa	12	New Hampshire	1
Kansas	12	Utah	1
Delaware	10		
Michigan	6	Canada	6
Minnesota	6	Ireland	5
Tennessee	6	Hawaiian Islands	3
Texas	6	India	3
Alabama	5	England	2
Colorado	5	Syria	2
Connecticut	5	Asia Minor	1
Georgia	5	Brazil	1
Massachusetts	5	British Columbia	1
California	4	Ceylon	1
Mississippi	4	China	1
Virginia	4	Germany	1
Nebraska	3	Macedonia	1
North Dakota	3	Scotland	1
South Carolina	3		

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ABBREVIATIONS.

N, Nassau Hall.
N E, North Entry of East College.
S E, South Entry of East College.
N W, North Entry of West College.
S W, South Entry of West College.
N R, North Entry of Reunion Hall.
S R, South Entry of Reunion Hall.
N M R, North Middle Entry of Reunion Hall.
S M R, South Middle Entry of Reunion Hall.
E W, East Entry of Witherspoon Hall.
W W, West Entry of Witherspoon Hall.
M W, East Middle Entry of Witherspoon Hall.
W M W, West Middle Entry of Witherspoon Hall.
N Ed, North Entry of Edwards Hall.
S Ed, South Entry of Edwards Hall.
U, University Hall.
N D, North Entry of Albert B. Dod Hall.
M D, Middle Entry of Albert B. Dod Hall.
S D, South Entry of Albert B. Dod Hall.
E B, East Entry of David Brown Hall.
W B, West Entry of David Brown Hall.
S E B, South East Entry of David Brown Hall.
S W B, South West Entry of David Brown Hall.
A S, Alexander Hall, Seminary.
B S, Brown Hall, Seminary.
H S, Hodge Hall, Seminary.

HONORS AND DEGREES CONFERRED.

DEGREES.

DEGREES IN COURSE, CONFERRED NOVEMBER, 1894.

MASTERS OF ARTS (*A.M.*).....2.

David E. Coburn, A.B., Univ. of New Brunswick, 1892.
Rev. John Milligen Waddell, 1886.

BACHELORS OF ARTS (*A.B.*).....3.

Philip Paul Bliss, as of the Class of 1894.
Alfred High High, as of the Class of 1894.
Reuben Jay Flick, Jr., as of the Class of 1894.

CIVIL ENGINEERS (*C.E.*).....3.

Walter Clare Stearns, as of the Class of 1893.
Thomas Hamilton Bowes, as of the Class of 1894.
Frank Clinton Smythe, as of the Class of 1894.

HONORARY DEGREES. CONFERRED FEBRUARY, 1895.

LL.D.—William Butler Hornblower, '71, New York.
D.D. —Rev. Josephus Leander Sooy, '71, New York.

DEGREES IN COURSE, CONFERRED FEBRUARY, 1895.

DOCTOR OF PHILOSOPHY (*Ph.D.*).....1.

Rev. Otto Becher.

MASTERS OF ARTS (*A.M.*).....2.

Silas Everett Hurin, '82,
John Bright, '90.

CIVIL ENGINEER (*C.E.*) .....1.

John Sheldon Paul.

HONORARY DEGREES, CONFERRED JUNE, 1895.

LL.D.—Samuel Hayes Pennington, '25, New Jersey.
Charles Beatty Alexander, '70, New York.
Hon. John W. Foster, District of Columbia.

D.D. —Rev. John Wherry, '58, China.
Rev. Edward Read Burkhalter, '62, Iowa.
Rev. Russell Cecil, '74, Alabama.
Rev. William Lawrence Ledwith, '74, Pennsylvania.

A.M. —Spencer Ervin, Pennsylvania.
Clarence M. Bushnell, New York.

DEGREES IN COURSE, CONFERRED JUNE, 1895.

MASTERS OF ARTS (*A.M.*).....95.

Kenneth Brown, '93, Charles Alexander Robinson, '94,
Benjamin Franklin Carter, '94, Frank Forrester Thompson, '94,
John Williams Lester Jones, '94,
Thomas Franklin Barrier, A.B., *Emporia, Kan.*, 1893.
Frank Denison Breed, A.B., *Emporia, Kan.*, 1893.
Robert Patterson Byers, A.B., *Queen's University, Canada*, 1893.
Franklin Carter Everitt, A.B., *Emporia, Kan.*, 1893.
John Morris Gillette, A.B., *Park College, Mo.*, 1892.
Humphrey Gilbert Gratz, A.B., *Dalhousie Univ.*, 1892.
Wilton Tyler Hudson, A.B., *Furman University*, 1891.
Henry Ezekiel Jackson, A.B., *Lafayette*, 1893.
Archibald Balloch Jamison, A.B., *New Windsor Col., Md.*, 1893.
Harry Bell King, A.B., *Westminster Coll.*
Hugh Scott McMullan, A.B., *Royal University, Ireland*, 1892.
Irving William Langston Roundtree, A.B., *Lincoln Univ.*, 1886.
Robert Watson, A.B., *Univ. of New Brunswick*, 1893.
Clement Edwin Babb Ward, A.B., *Emporia, Kan.*, 1892.
Clarence Russell Williams, A.B., *Univ. of Pennsylvania*, 1892.
Richard Henry Willis, A.B., *Univ. of Arkansas.*

Francis S. Reeder, '63, Edward Dickinson Duffield, '92,
Howard J. Reeder, '63, John William Easton, '92,
Samuel G. Dornblaser, '84, John Montgomery Gaston, '92,
Ferdinand Jelke, '84, Herbert Budd Gibby, '92,
Charles Frederick Parmly, '84, Andrew Caldwell Gray, '92,
Charles Robert Wylie, Jr., '85, William Harris, Jr., '92,

Ulysses Mercur, '88,
George E. Scott, '88,
Howard McWilliams, '88,
John C. Bucher, '90,
J. W. Hirst, '90,
Clarke Benedict Williams, '90,
Cornelius Rea Agnew, '91,
George I. Bergen, '91,
William Post Herrrick, '91,
Charles Marion Jamison, '91,
Francis Ernest Lloyd, '91,
Franklin T. Moore, '91,
Frederick Randolph Bailey, '92,
Robinson Potter Dunn Bennett, '92,
Martin Voorhees Bergen, Jr., '92,
John William Rufus Besson, '92,
Leonidas Huston Besson, '92,
Frederick Gregory Betts, '92,
George Whitfield Betts, '92,
William Edward Biederwolf, '92,
Cassius Edwin Bixler, '92,
William Little Bradley, '92,
George William Burleigh, '92,
Courtlandt Patterson Butler, '92,
Alonzo Church, '92,
Marshall Andrews Christy, '92,
Elmer Baldwin Cole, '92,
Varnum Lansing Collins, '92,
Pierre Frederick Cook, '92,
Richard Coulter, '92,
Robert Denniston, '92,
Charles Delucena Hart, '92,
Henry Clay Havens, '92,
Robert Pollock Howie, '92,
Joseph Miller Huston, '92,
Samuel Craig Huston, '92,
John Benem Kouwenhoven, '92,
Thomas Cowden Laughlin, '92,
Lorenzo Grenville Lyon, '92,
Clarence Arthur McWilliams, '92,
Elmer Llewellyn Meyers, '92,
Levi S. Mogel, '92,
Charles Ogden Mudge, '92,
Bowdre Phinizy, '92,
William Kelly Prentice, '92,
Alfred Randolph Riggs, '92,
John Sinclair Roberts, '92,
Joseph Mitchell Shellabarger, '92,
Ralph Duffield Small, '92,
Uriah Franklin Smiley, '92,
Charles Philip Spooner, '92,
William Stump, '92,
John Van Ness, '92,
Peter Vredenburgh, '92,
Calvin Wight, '92,
Edward Van Dyke Wight, '92,
James Westervelt, '92,
John Glover Wilson, '92,
Clinton Tyler Wood, '92,
Richard Flavel Woods, '92,
Benjamin Vernon White, '92,
Jesse Lynch Williams, '92.

MASTER OF SCIENCE (*M.S.*) .....1.

Ralph Henry Kunstadter.

BACHELORS OF ARTS (*A.B.*).....149.

Alexander Speer Andrews,	Zanesville, O.
Carrington Gindrat Arnold,	Providence, R. I.
William James Baird,	Merion Station, Pa.
William Van Dyke Belden,	Princeton, N. J.

Ernest Graves Bergen,	Harbor Springs, Mich.
William Beveridge,	Minaville, N. Y.
Lynford Biddle,	Philadelphia, Pa.
Clarence Hamlin Bissell,	Milford, N. Y.
James Blair, Jr.,	Scranton, Pa.
William John Bone,	Thorndale, Pa.
John Hall Bowman,	Plainfield, N. J.
Frederick Clark Bradner,	Warwick, N. Y.
Dickson Queen Brown,	New York City.
Harry Oliver Brown,	Irwin, Pa.
Joseph Shallcross Bunting,	Philadelphia, Pa.
William Foster Burns,	Evanston, Ill.
Willis Howard Butler,	New York City.
Charles Lucius Candee,	Chicago, Ill.
Howard Doty Carpenter,	Hancock, Mass.
Ray Harrison Carter,	Philadelphia, Pa.
John Collings Caton,	Manchester, Eng.
Charles Beach Condit,	West Orange, N. J.
Lester Morris Conrow,	Long Branch City, N. J.
Albert Samuel Cook,	Greencastle, Pa.
William Brown Cooke,	Wheeling, W. Va.
Allen Wickham Corwin,	Middletown, N. Y.
Samuel G. Craig,	Tarkio, Mo.
Alfred Cramer, Jr.,	Cramer Hill, N. J.
John Forsyth Crawford,	Damascus, Syria.
James Stoner Crawford,	Arch Spring, Pa.
Charles Clement Cresson, Jr.,	San Antonio, Tex.
Walter Raines Darby,	Plainfield, N. J.
Charles Ernest Dechant,	Catawissa, Pa.
Daniel Weaver Dexter,	Elmira, N. Y.
Huston Dixon,	Trenton, N. J.
Arthur Dunn,	Chicago, Ill.
Ernest Dick Egbert,	Franklin, Pa.
Edward Hilts Ewing,	Blairsville, Pa.
John Thomson Faris,	Pittsburgh, Pa.
Richard Milburn Farries,	Florida, N. Y.
Gordon Fisher,	Swissvale, Pa.
Charles Leon Fisk,	Wallingford, Conn.
James Ralston Flemming,	Washington, D. C.

Curtis Smiley Foster,	East Brady, Pa.
John Selby Frame,	Troy, N. Y.
Robin William Cummins Francis,	Cincinnati, O.
Demeter Nicola Furnajieff,	Macedonia.
Wilfrid Matchin Hager,	East Orange, N. J.
Clarence Mitchell Hamilton,	South Orange, N. J.
Edwin Dodge Hardin,	Boston, Mass.
John Cowden Harding,	Evanston, Ill.
Ellwood Harlow,	New York City.
Robert Patterson Harris,	Princeton, N. J.
Norman Baldwin Harrison,	Caldwell, N. J.
Rollin Zeller Hartzler,	East Northfield, Mass.
Wallace Pinkney Harvey,	Baltimore, Md.
Richard Daniel Hatch,	New York City.
Alfred Hayes, Jr.,	Lewisburg, Pa.
Selden Long Haynes,	South McAlester, I. T.
Charles Elvin Hendrickson, Jr.,	Mount Holly, N. J.
Gerardus Post Herrick,	New York City.
Benjamin Lewis Hirshfield,	Steubenville, O.
Edgar Holden, Jr.,	Newark, N. J.
Edward Henry Hoos,	Jersey City, N. J.
Samuel Howe,	Chicago, Ill.
Thomas Hudson,	Waynesburg, Pa.
Edward Miller Hunt,	Trenton, N. J.
Theodore Sollace Huntington,	Columbus, O.
Paul Griswold Huston,	Cincinnati, O.
Andrew Clerk Imbrie,	New York City.
Robert Alexander Inch,	Washington, D. C.
Vernon Kremer Irvine,	Bedford, Pa.
Darwin Rush James, Jr.,	Brooklyn, N. Y.
Francis de Haes Janvier,	Newcastle, Del.
Edward Ford Johnson,	Michigan City, Ind.
Lucius Carter Kennedy,	Scranton, Pa.
Richard Lea Kennedy,	Colorado Springs, Col.
Harvey Wilson Koehler,	Kingston, Pa.
William Remsen Lane,	Orange, N. J.
Thomas Leggate,	Allegheny, Pa.
Frederic Wheeler Lewis,	Wichita, Kan.
Walter Gillette Libby,	Summit, N. J.

William Henry Logan, Jr.,	Princess Anne, Md.
John Walterhouse Lord,	Baltimore, Md.
Robert Livingston Loughran,	Kingston, N. Y.
Leslie Clifford Love,	Montclair, N. J.
Victor Herbert Lukens,	Elizabeth, N. J.
William Hamilton MacColl,	Caledonia, N. Y.
Harold Fowler McCormick,	Chicago, Ill.
Stanley Robert McCormick,	Chicago, Ill.
Andrew Reed McNitt,	Siglerville, Pa.
Henry Augustus McNulty,	South Orange, N. J.
Henry Buck Master,	Philadelphia, Pa.
Lawrence Porter Miller,	Gerardstown, W. Va.
William Hudson Morse,	Trenton, N. J.
Franklin Murphy, Jr.,	Newark, N. J.
William Cunningham Neill,	Warren, Pa.
Alexander Howard Nelson,	Chambersburgh, Pa.
Hugh Nelson,	Selma, Ala.
Andrew Parker Nevin,	Philadelphia, Pa.
John Sargent Newbold,	Philadelphia, Pa.
Edwin Mark Norris,	Corning, Ia.
Roy Lorton North,	Germantown, Pa.
Edward Roe Otheman,	New York City.
Jacob Schweighauser Otto,	Buffalo, N. Y.
Joseph William Park,	Corinth, Miss.
Christy Payne,	Titusville, Pa.
Lewis Frederic Pease,	Germantown, Pa.
William Wirt Phillips,	New York City.
Daniel Fellows Platt,	Englewood, N. J.
Harry Morgan Post,	Brooklyn, N. Y.
William Henry Roberts, Jr.,	Philadelphia, Pa.
William Dee Robertson,	Cambridge, N. Y.
Robert Edwin Ross,	Chicago, Ill.
Thomas Ross,	Doylestown, Pa.
Warren Ilsley Seymour,	Pittsburgh, Pa.
Harry English Shaw,	Long Branch, N. J.
Arthur Mason Sherman,	Long Branch City, N. J.
Charles Sinnickson,	Philadelphia, Pa.
Joseph Curtis Sloane,	Beaver Falls, Pa.
Edgar Mason Smead,	Oswego, N. Y.

John Clarence Smith,	Asbury, N. J.
Fitzhugh Coyle Speer,	Pittsburgh, Pa.
Ernest Taylor Stewart,	Indiana, Pa.
William Ridgley Stone,	Washington, D. C.
Clement Moore Summers,	Ottumwa, Ia.
Edward Forrester Holden Sutton,	New York City.
Arthur Rodgers Teal,	Elizabeth, N. J.
John Hamilton Thacher,	Kansas City, Mo.
Thomas Gawthrop Trenchard,	Church Hill, Md.
Oliver Welton Upson,	Cleveland, O.
Wilbur Marshal Urban,	Tunkhannock, Pa.
Frank Collins Van Sellar,	Paris, Ill.
Raymond Lynde Wadhams,	Wilkes-Barre, Pa.
Charles Samuel Waldo,	Prattsburg, N. Y.
Philip George Walker,	Charleston, W. Va.
William Douglas Ward,	Rochester, N. Y.
Dexter Mason Ferry Weeks,	Webster, N. Y.
John Fox Weiss,	Harrisburg, Pa.
Arthur Register Wells,	Corning, Ia.
Robert Ralph Wherry,	Peking, China.
George White,	Titusville, Pa.
Howard Erskine White,	New York City.
Joe Billette White,	Butler, N. J.
Allan Derrick Williams,	Uniontown, Pa.
Linsly Rudd Williams,	New York City.
Louis Clayton Woodruff,	Southington, Conn.
Francis Nicoll Zabriskie,	Princeton, N. J.
Robert Lansing Zabriskie,	Aurora, N. Y.

ELECTRICAL ENGINEERS (*E.E.*).....8.

Harold McKnight Beck,	Germantown, Pa.
Frank Leonard Kellogg,	Orange, N. J.
Howard McClenahan,	Port Deposit, Md.
James Ditmars Remsen,	Brooklyn, N. Y.
Will Spoor Rogers,	Omaha, Neb.
William Corbit Spruance, Jr.,	Wilmington, Del.
George Randall Swain,	Newark, N. J.
George Clarence Wintringer,	Steubenville, O.

BACHELORS OF SCIENCE (*B.S.*).....31.

Herbert Fowler Sill, as of the Class of 1894.

Ralph Waldo Bailey,	Elizabeth, N. J.
Theodorus Bailey,	New York City.
Henry Hervey Brady, Jr.,	Chesapeake City, Md.
John Hubert Brooks,	Scranton, Pa.
Walter Milton Buckingham,	Longmont, Col.
Henry Matthews Canby,	Wilmington, Del.
Rhodes Clay,	Mexico, Mo.
Howard Augustus Colby,	New York City.
Harden Lake Crawford,	New York City.
James Windsor Decker,	Scranton, Pa.
Howard De Forest,	New York City.
Gail Ayers Dray,	Chicago, Ill.
Victor Edgar Egbert,	Pittsburgh, Pa.
Macomb Kean Elmer,	Bridgeton, N. J.
Jesse Howard Fry,	Rochester, Pa.
Theodore Fossit Furness,	Philadelphia, Pa.
Horatio Whitridge Garrett,	Baltimore, Md.
John Work Garrett,	Baltimore, Md.
Joseph Jessup,	Woodbury, N. J.
Richard Chambers Kumler, A.B.,	Dayton, O.
Edwin Snow La Fetra,	Washington, D. C.
Charles Henry Leeds,	Stamford, Conn.
Walter Moses,	Trenton, N. J.
Edward Munn,	East Orange, N. J.
Anderson Offutt,	Rockville, Md.
Orrel Ardrey Parker,	Fostoria, O.
Lynn Ryerson Rutter,	Chicago, Ill.
David Speer,	Pittsburgh, Pa.
Archer Whitney Seaver,	Philadelphia, Pa.
Knox Taylor,	Bound Brook, N. J.

CIVIL ENGINEERS (*C.E.*) ....16.

Harrison Wilson Inslee, as of the Class of 1894.

George Fisher Barton,	Jersey City, N. J.
Carleton Curtis,	New York City.
Joseph Douglas Green,	Syracuse, N. Y.
James Edward Hayes, Jr.,	Brooklyn, N. Y.

Charles Kellerman,	McKee's Rocks, Pa.
Edward McCormick,	Germantown, Pa.
Courtland Nixon,	Belle Meade, N. J.
Frederick Albert Norris,	New York City.
James Donaldson Paxton,	Princeton, N. J.
James Wilson Paxton, Jr.,	Philadelphia, Pa.
Thomas Haines Pierson,	Summit, N. J.
Charles Arthur Poole,	Rochester, N. Y.
Frank Reynolds,	Maquoketa, Ia.
William Henry Wells,	Jersey City, N. J.
Daniel Parvin Westcott,	Cramer Hill, N. J.

HONORS—1894-1895.

COMMENCEMENT HONORS. FOR GENERAL EXCELLENCE.

SENIOR HONORMEN.—FIRST GROUP—*A.B., Magna cum laude.*

J. F. Crawford,	W. D. Ward, *Latin Salutatory*,
A. Hayes, Jr.,	A. R. Wells,
D. F. Platt, *English Salutatory*,	W. M. Urban.
J. C. Sloane,	

SECOND GROUP—*A.B., Cum laude.*

J. H. Bowman,	L. C. Kennedy,
F. C. Bradner,	R. L. Kennedy,
W. F. Burns,	F. W. Lewis,
W. H. Butler,	V. H. Lukens,
H. D. Carpenter,	S. R. McCormick,
A. S. Cook,	H. A. McNulty,
W. B. Cooke,	J. S. Newbold,
S. G. Craig,	E. M. Norris,
J. S. Crawford,	E. R. Otheman,
W. R. Darby,	J. W. Park,
C. E. Dechant,	C. Payne,
D. W. Dexter,	R. E. Ross,
J. R. Flemming,	W. I. Seymour,
C. S. Foster,	J. C. Smith,

J. S. Frame,
N. B. Harrison,
R. D. Hatch, *Valedictory*,
F. de H. Janvier,
E. T. Stewart,
F. C. Van Sellar,
D. M. F. Weeks.

SENIOR SPECIAL HONORS. (See p. 66.)

PHILOSOPHY. *High Honors*—J. F. Crawford, D. W. Dexter, E. M. Norris, W. M. Urban.

HISTORY, JURISPRUDENCE AND POLITICS. *High Honors*—A. Hayes, Jr. *Honors*—D. F. Platt.

CLASSICS. *High Honors*—J. C. Sloane, L. C. Woodruff. *Honors*—R. P. Harris.

ENGLISH. *High Honors*—H. B. Master.

NATURAL SCIENCE. *High Honors*—C. S. Foster.

MATHEMATICS. *High Honors*—W. D. Ward.

FELLOWS.

(For names of Fellows see p. 22.)

SENIOR PRIZEMEN.

ALEXANDER GUTHRIE MCCOSH PRIZE.

J. F. Crawford.

LYNDE PRIZE DEBATE.

First, B. F. Hirshfield.
Second, F. W. Lewis.
Third, W. F. Burns.

Lynde Debaters.

From the American Whig Society.

W. F. Burns,
A. Hayes, Jr.,
J. W. Park,

From the Cliosophic Society.

S. L. Haynes,
B. F. Hirshfield,
F. W. Lewis.

BAIRD PRIZEMEN.

The Baird Prize,	A. C. Imbrie.
In Oratory,	V. H. Lukens.
In Delivery,	W. H. Butler.
In Poetry,	W. M. Urban.
In Disputation,	*First*, J. W. Park.
	Second, A. Hayes, Jr.

Competitors appointed for Excellence in English Composition: For Baird Prize and Prize for Oratory—W. H. Butler, R. D. Hatch, B. L. Hirshfield, A. C. Imbrie, E. M. Norris, A. R. Wells. *For Prize for Oratory*—R. H. Carter, J. T. Faris, A. Hayes, Jr., V. H. Lukens, H. C. McNulty, R. E. Ross, D. M. F. Weeks.

CLASS OF 1859 PRIZE IN ENGLISH LITERATURE.

H. B. Master.

GEORGE POTTS BIBLE PRIZES.

C. B. Condit.
B. M. Smead.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.

H. M. Post.

THEODORE CUYLER PRIZE IN ECONOMICS.

R. E. Ross.

CLASS OF 1869 PRIZE IN ETHICS.

D. W. Dexter.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

E. H. Hoos.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.

R. F. Sterling.

THE NEW YORK HERALD PRIZE.

A. Dunn.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

H. B. Master.

JUNIOR PRIZEMEN.

JUNIOR FIRST HONOR SCHOLAR.

F. W. Loetscher.

MACLEAN PRIZE.

E. S. Worcester.

JUNIOR ORATOR MEDALS.

First, J. J. Moment.
Second, G. H. Waters.
Third, J. M. Trout.
Fourth, E. W. Hamilton.

Competing Junior Orators.

From the American Whig Society.	*From the Cliosophic Society.*
E. W. Hamilton,	J. J. Moment,
F. W. Loetscher,	J. M. Trout,
E. B. Turner,	G. H. Waters,
E. S. Worcester,	C. W. Wisner, Jr.

DICKINSON PRIZE.

J. M. Trout.

THOMAS B. WANAMAKER ENGLISH PRIZE.

F. W. Loetscher.

CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Anglo-Saxon, F. W. Loetscher.
English Literature, J. M. Trout.

SPECIAL PRIZE IN HISTOLOGY.

W. Keller.

JUNIOR HONORMEN.

First Group.

P. H. Churchman,
J. B. Cochran,
J. P. Erdman,
L. H. Gray,
E. B. Hodge, Jr.,
F. W. Loetscher,
A. H. Lybyer,
W. A. Mather,
J. J. Moment,
M. C. Morgan,
W. H. Musser,
R. B. Perry,
J. M. Trout,
Herbert Ure,
E. S. Worcester.

Second Group.

F. O. Allen, Jr.,
H. B. Armes,
J. N. Beam,
E. H. Bishop,
C. B. Bostwick,
E. S. Brearley,
C. O. Bressler,
H. C. Briggs,
J. R. Delafield,
A. A. Doolittle,
W. F. Doty,
A. N. Easton,
C. M. Evans,
B. S. Halsey,
E. W. Hamilton,
A. T. Johnson,
W. L. Johnson,
A. G. Killmer,
Leroy Kirkman,
R. R. Knight,
W. E. Lampe,
R. L. Litch,
R. M. McElroy,
S. W. Miller, Jr.,
E. K. Mills,
H. M. Moore,
J. L. Myers,
C. E. Patton,
H. G. Pierce,
J. A. Potter,
S. C. Reese,
J. C. Sherriff,
F. S. Smithers, Jr.,
W. F. M. Sowers,
O. B. Sprecher,
S. R. Spriggs,
F. H. Ward,
G. H. Waters,
L. J. Wayave, Jr.

JUNIOR HONORMEN, SCHOOL OF SCIENCE.

B.S. Course—Logan Coleman, F. D. Parker.

C.E. Course—1. William Bush,
2. L. L. Smith,
3. W. T. Lyle,
4. F. G. Stewart.

SOPHOMORE PRIZEMEN.

CLASS OF 1861 PRIZE.

H. N. Russell.

FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

A. W. Leonard.

CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

J. H. Keener.

STINNECKE SCHOLAR.

C. B. Bostwick.

SOPHOMORE SPECIAL HONORS.

(See page 68.)

GREEK. *High Honors*—Seward Erdman. *Honors*—H. G. Padget, W. M. Post.

LATIN. *High Honors*—A. M. Patterson. *Honors*—J. M. Frame.

CLASSICS. *Honors*—F. N. Jessup, D. Magie, Jr.

MATHEMATICS. *Highest Honors*—H. N. Russell. *High Honors*—H. M. Beam, N. Stahl, A. C. Tyler. *Honors*—H. B. Abbot, E. W. Axson.

SOPHOMORE HONORMEN.

First Group.

E. W. Axson,	Lawrenceville.
F. N. Jessup,	Lawrenceville.
W. P. Jessup,	Goshen High School, Goshen, N. Y.
A. W. Leonard,	Mr. Leal's School, Plainfield, N. J.
David Magie, Jr.,	Lyon's Classical School, N. Y. City.
J. H. Nichols,	Delaware Academy, Delhi, N. Y.
A. M. Patterson,	Miss A. M. MacCracken, Xenia, O.
H. N. Russell,	H. N. Van Dyke and Princeton Prep. School.
Nicholas Stahl,	School of the Lackawanna, Scranton, Pa.

Second Group.

H. M. Beam,	Franklin and Marshall Acad., Lancaster, Pa.
F. W. Brown,	Long Branch High School.
P. R. Colwell,	Warwick Inst., Warwick, N. Y.
Robert Comin,	Muskingum College, New Concord, O.
Seward Erdman,	Morristown High School, Morristown, N. J.
J. M. Frame,	High School, Reading, Pa.
J. P. Hall,	Central High School, Minneapolis, Minn.
J. H. Keener,	
B. R. Miller,	Germantown Academy.
H. G. Padget,	Owego Free Academy.
F. B. Pierson,	Lawrenceville.
W. M. Post.	Lawrenceville.
W. A. W. Stewart,	Berkeley School, N. Y. City.
H. F. Stockwell,	Phillips Academy, Exeter, N. H.

SOPHOMORE HONORMEN, SCHOOL OF SCIENCE.

B. S. Course.

1. Edwin Shortz, Jr.,	Harry Hillman Academy, Wilkes-Barre, Pa.
2. F. R. Haussling,	Newark Academy, Newark, N. J.

C. E. Course.

1. John De Gray,	Class. and Scientific School, Paterson, N. J.
2. S. W. Taylor, Jr.,	Washington High School, Washington, D. C.
3. H. A. Harris,	H. N. Van Dyke.
4. R. T. Leipold,	Friends' Select School, Wilmington, Del.
5. Edwin Moore,	Bethlehem High School, Bethlehem, Pa.

FRESHMAN FIRST HONOR PRIZE.

H. H. Yocum.

FRESHMAN HONORMEN.

First Group.

F. L. Johnson,	Newark High School, Newark, N. J.
C. S. Reed,	Morgan Park Academy, Morgan Park, Ill.
P. E. Robinson,	Lawrenceville.
H. H. Yocum,	Mercersburg College, Mercersburg, Pa.

Second Group.

G. A. Armstrong,	Newburg Free Academy, Newburg, N. Y.
H. E. Belcher,	Union Free Academy, Newark Valley, N. Y.
R. S. Birch,	Reading High School, Reading, Pa.
J. I. Blair, Jr.,	Mr. Browning's School, 29 W. 55th St., N. Y.
H. A. Brown,	Long Branch High School.
J. W. Churchman,	Van Rensselaer Seminary, Burlington, N. J.
E. M. Clark,	William Penn Charter School, Philadelphia.
C. P. Cowles,	St. Johnsbury Academy, St. Johnsbury, Vt.
C. H. Hale,	The Webb School, Bell Buckle, Tenn.
B. H. Leonard,	Ohio Wesleyan Univ., Delaware, O.
W. F. McCombs,	The Webb School, Bell Buckle, Tenn.
C. L. McCoy,	Peoria High School, Peoria, Ill.
P. C. Martin,	Wittenberg Acad., Springfield, O.
C. A. Marton,	Peddie Institute, Hightstown, N. J.
E. P. Prentice,	Halsey's Collegiate School, 34 W. 40th St., N. Y.
Leon Stein,	Newark High School, Newark, N. J.
F. J. Sutton,	Columbia Inst., N. Y. City.
J. S. Thomas,	Mr. Leal's School, Plainfield, N. J.
F. K. Watson,	South Jersey Institute, Bridgeton, N. J.

FRESHMAN HONORMEN—SCHOOL OF SCIENCE.

1. E. C. Heald,	Friends' Select School, Wilmington, Del.
2. Hutton Kennedy,	De Lancey School, Philadelphia.
3. Harrison Hall,	Mr. G. C. Deaver, Collegiate Inst , Dayton, O.
4. F. C. Groos.	San Antonio Acad., San Antonio, Texas.

PRIZES FOR FRESHMAN ENTRANCE EXAMINATIONS.

ALUMNI PRIZE IN NEW YORK CITY—Richard Webster.

GEORGE W. CHILDS PRIZES IN PHILADELPHIA—*Academic*—H. B. Patton.

ALUMNI ASSOCIATIONS.

THE ALUMNI ASSOCIATION OF NASSAU HALL.

Founded 1826.

President, Hon. ROBERT STOCKTON GREEN, LL.D., '50.

Secretaries, Professor JOHN T. DUFFIELD, D.D., LL.D., '41.
Professor HENRY C. CAMERON, Ph.D., D.D., '47.
M. TAYLOR PYNE, LL.B., '77.

The annual meeting and the Alumni Dinner are held in University Hall on Tuesday of Commencement week, at 1:30 P. M. The membership includes all graduates and officers of the College.

PRINCETON NATIONAL ALUMNI ASSOCIATION.

Organized 1893.

President, M. TAYLOR PYNE, Esq., '77, New York City.

Secretary, Professor WILLIAM LIBBEY, D.Sc., '77, Princeton, N. J.

Treasurer, JUNIUS S. MORGAN, Esq., '88, New York City.

This Association is composed of delegates selected by the various local associations. It meets annually at Princeton during Commencement week, and at such other times as ordered by the Executive Committee.

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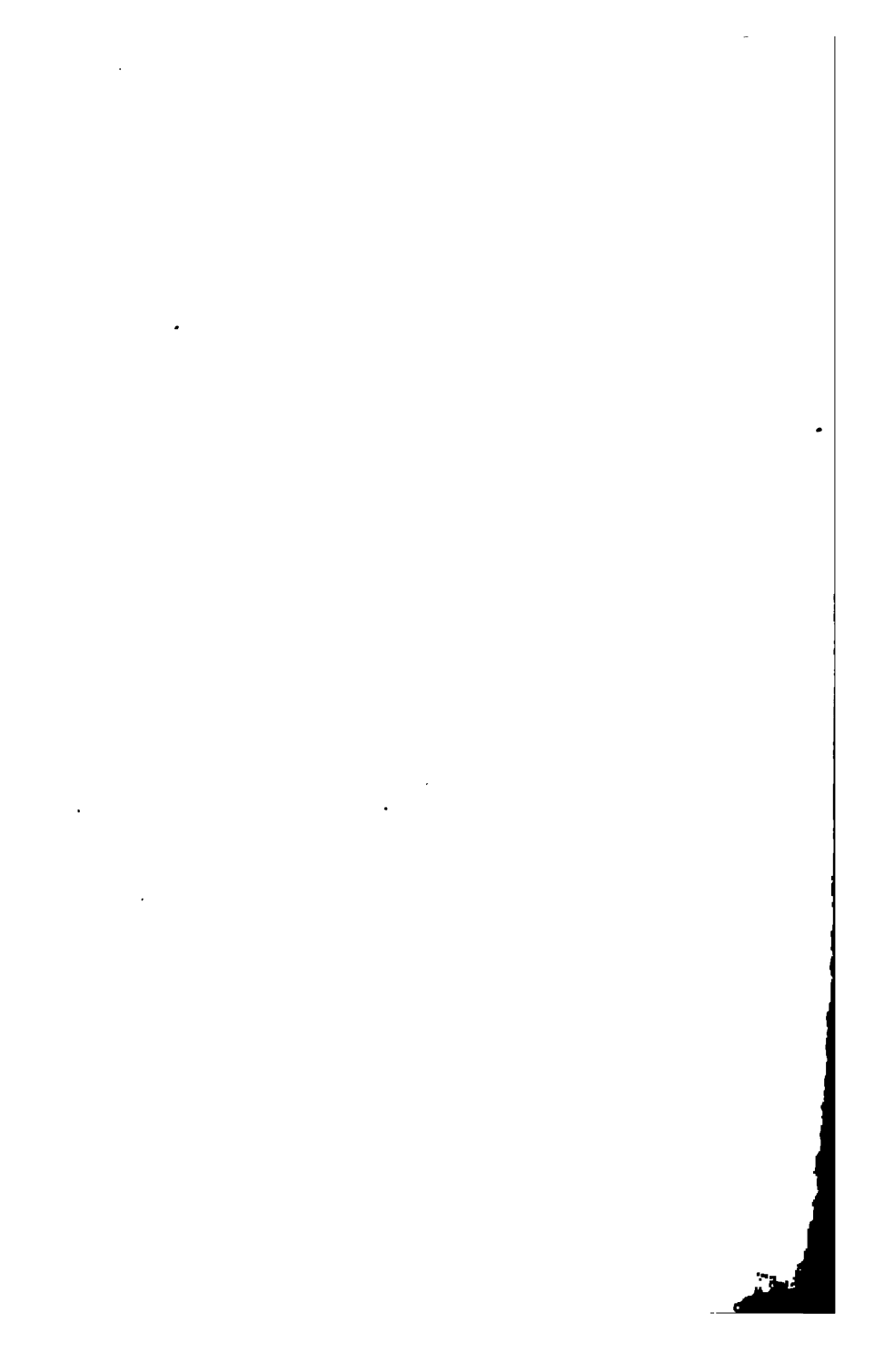
Founded 1866.

President, HUGH L. COLE, Esq., '59, 59 Wall St.
Secretary, GEORGE W. BURLEIGH, '92, 111 Broadway.

THE PRINCETON ALUMNI ASSOCIATION OF WESTERN NEW YORK.

President, Rev. HENRY E. MOTT, '74.
Secretary, CLARENCE M. BUSHNELL, '77,
311 Main St., Buffalo, N. Y.
Secretary, GERARD B. F. HALLOCK '82,
10 Livingston Park, Rochester, N. Y.

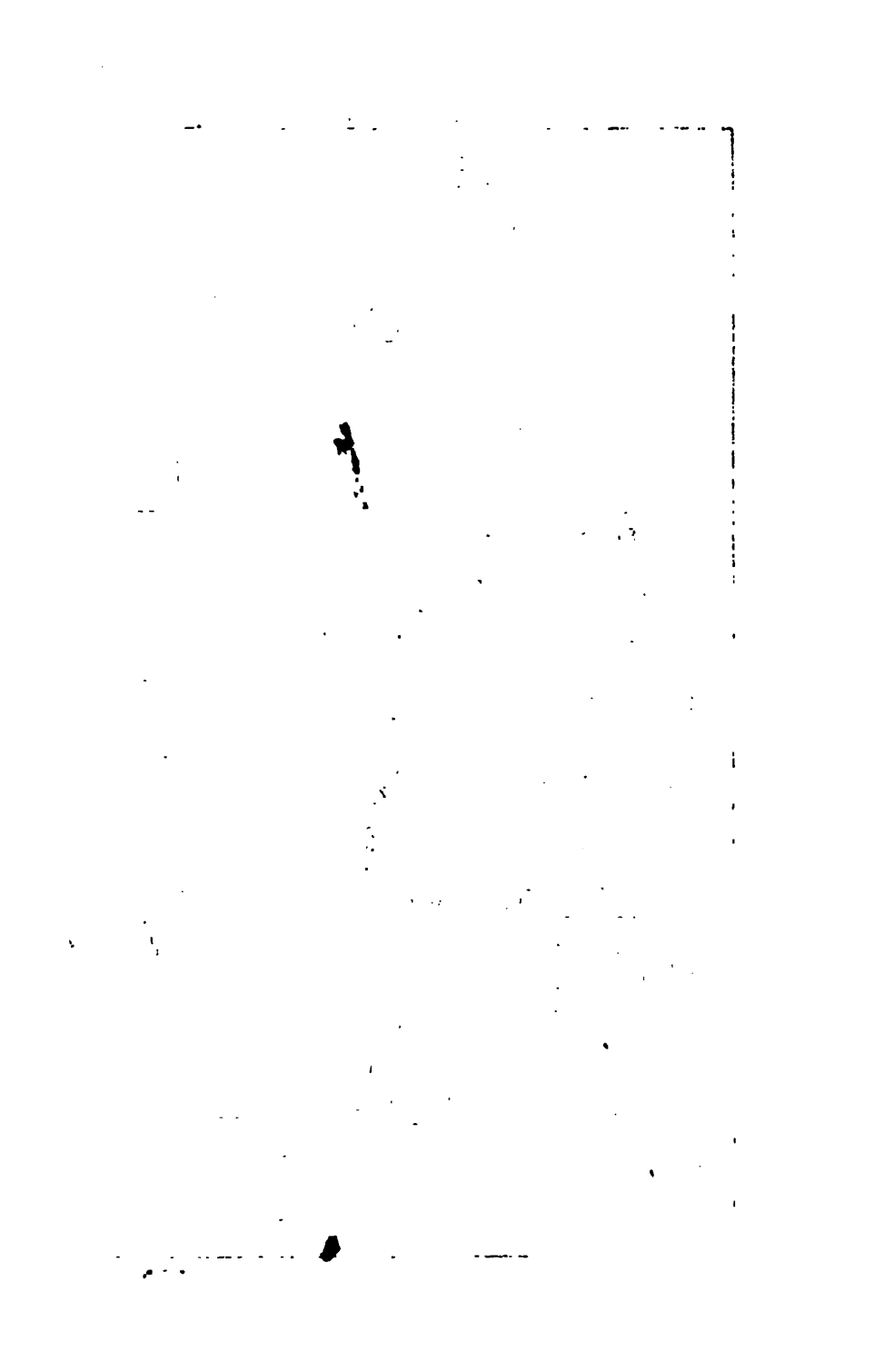


CATALOGUE

OF

PRINCETON UNIVERSITY

1896-97



		Erected.
1.	Nassau Hall,	1756
2.	Dean's House,	1756
3.	College Offices,	1803
4.	West College,	1836
5.	Clio Hall,	1838
6.	Whig Hall,	1838
7.	Prospect,	1849
8.	Halsted Observatory,	1869
9.	Gymnasium,	1869
10.	Reunion Hall,	1870
11.	Dickinson Hall,	1870
12.	Library,	1873 & 1897
13.	School of Science,	1873
14.	University Hall,	1876
15.	Witherspoon Hall,	1877
16.	Observatory of Instruction,	1878
17.	Murray Hall,	1879
18.	Edwards Hall,	1880
19.	Marquand Chapel,	1881
20.	Biological Laboratory,	1887
21.	Art Museum,	
22.	Magnetic Observatory,	1889
23.	Dynamo Building,	1889
24.	Albert B. Dod Hall,	1890
25.	Chemical Laboratory,	1891
26.	David Brown Hall	1891
27.	Alexander Hall,	1892
28.	Infirmary,	1892
29.	Brokaw Memorial,	1892
30.	Blair Hall,	1897
41.	First Church.	
42.	Railroad Station.	
43.	Diagnostic Station.	
44.	Tennis Building.	

CATALOGUE

OF

PRINCETON UNIVERSITY

1896-97

CATALOGUE

OF

PRINCETON UNIVERSITY

ONE HUNDRED AND FIFTIETH YEAR

1896-97

Princeton Press

For Catalogues apply to
H. N. Van Dyke, Registrar.

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CALENDAR.

1896.

Sept. 22–23.	Examinations for admission, and the removal of entrance conditions, in Princeton only.
Sept. 23.	First term begins.
Sept. 28–Oct. 3.	Examinations for removal of first and second term conditions.
Sept. 30.	Preliminary examination of candidates for Doctor's degrees.
Oct. 20–22.	Celebration of the 150th anniversary of the signing of the charter.
Nov. 1–7.	Second opportunity for removal of second term conditions.
Nov. 26.	Thanksgiving Day.
Dec. 23, 12.30 P. M.	Christmas vacation begins.

1897.

Jan. 6.	Christmas vacation ends.
Jan. 10.	Day of Prayer for Colleges.
Feb. 1–10.	Term Examinations.
Feb. 10.	End of first term.
Feb. 11.	Second term begins.
Feb. 22.	Washington's Birthday—Class of 1876 Prize Debate, 10 A. M.
Mar. 15–20.	Examinations for removal of first term conditions.
April 15, 12 P. M.–April 20, 11.30 A. M.	Spring Recess.
April 30.	Last day for renewing room agreements for '97-'98. Annual allotment of rooms.
May 19–29.	Senior final examinations.
May 31–June 11.	Examinations of the three lower classes.
June 13.	Baccalaureate Sunday.
June 14–16.	Commencement Meeting of the Board of Trustees.
June 14.	Class Day—Junior Orations, 7.30 P. M.
June 15.	Reading of Theses by scientific students—Annual Meetings of Literary Societies and Alumni Association—Lynde Prize Debate, 7.30 P. M.

June 16. 150th Annual Commencement.
June 17–18. Examinations for admission, held simultaneously in Princeton and elsewhere.
June 18–Sept. 21. Long vacation.
Sept. 21–22. Examinations for admission, and the removal of entrance conditions, in Princeton only.
Sept. 22. First term begins—College assembles at 8 P. M. in Marquand Chapel.
Sept. 27–Oct. 2. Examinations for removal of first and second term conditions.
Sept. 29. Preliminary examinations for University degrees.
Nov. 1–6. Second opportunity for removal of second term conditions.
Nov. 25. Thanksgiving Day.
Dec. 22, 12.30 P. M. Christmas vacation begins.

1898.

Jan. 5. Christmas vacation ends.
Jan. 31–Feb. 9. Term examinations.
Feb. 9. End of first term.
Feb. 10. Second term begins.
April 7–12. Spring Recess.
May 18–28. Senior final examinations.
June 1–10. Examinations of the three lower classes.
June 15. 151st Annual Commencement.

1896.

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PRINCETON UNIVERSITY.

The College of New Jersey, now known as Princeton University, originated in the plan of certain Presbyterian clergymen and laymen of New York, New Jersey, and Pennsylvania, to found an institution "for the education of youth in the learned languages, and in the liberal arts and sciences." Its first charter was granted October 22d, 1746, by the Hon. John Hamilton, President of His Majesty's Council, and is noteworthy as the first college charter ever given in this country by a Governor or acting Governor with simply the consent of his Council.

A second and more ample charter was granted September 14th, 1748, by Jonathan Belcher, Esquire, Governor and Commander-in-chief of the province of New Jersey. After the war of the Revolution, the charter was confirmed and renewed by the Legislature of New Jersey. By that instrument the Trustees are empowered to hold and administer the property of the College, make laws for the government of the institution, choose its President and Faculty and confer degrees. The Board of Trustees is a self-perpetuating body, composed of twenty-seven members, with the Governor of the State as President *ex-officio*, or, in his absence, the President of the College. In response to the earnest desire of the petitioners for this charter, that "those of every religious denomination may have free and equal liberty and advantage of education in the said college, any different sentiments in religion notwithstanding," it was expressly provided that no "person of any religious denomination whatsoever" should be excluded "from free and equal liberty and advantage of education or from any of

the liberties, privileges or immunities of the said college on account of his or their being of a religious profession differing from the said trustees of the said college."

On April 27th, 1747, the Trustees made a public announcement that they had appointed the Rev. Jonathan Dickinson President, and that the college would be opened in the fourth week of May next at Elizabethtown. President Dickinson having died on the 7th of October following, the Rev. Aaron Burr assumed the duties of the Presidency and the college was removed from Elizabethtown to Newark. Soon after, it was removed from Newark to Princeton, where in 1754–55 the first college building was erected. It was proposed to name this building "Belcher Hall" in recognition of Governor Belcher's devoted services. At his request that it should be called Nassau Hall, the Trustees ordered "that the said edifice be in all time to come called and known by the name of Nassau Hall."

In the Presidency of Dr. James McCosh, beginning in 1868, the College entered upon a period of expansion and development, in which many new buildings were erected, the endowment increased, and the corps of instructors enlarged. The course of instruction continued to be exclusively that based upon the classical languages and leading to the degree of Bachelor of Arts, until the founding of the School of Science, when the degree of Bachelor of Science was also offered. That part of the College in which work was done under the old curriculum was then styled the Academic Department. The John C. Green School of Science, which has its own professors and instructors, was founded in 1878 upon an endowment of Mr. John C. Green. Instruction is given in General Science, Civil Engineering and Electrical Engineering. The course of instruction is based upon the modern languages and the natural sciences, and leads to the degree of Bachelor of Science or to technical degrees. The Department of Civil Engineering was

added in 1875, by further endowment from the residuary legatees of Mr. Green. The Department of Electrical Engineering was added in 1889, by the same donors.

Within the last few years the instruction which had been given to graduate students by many of the professors of the College was systematized and the Graduate Department was constituted. In connection with this department the degrees of Doctor of Philosophy and Doctor of Science are offered. This department is at present under the care of a Committee of the Faculty. On October 22d, 1896, the 150th anniversary of the signing of the first charter, the title of Princeton University was assumed. To celebrate the event a series of Academic exercises was held, extending over three days, October 20th, 21st and 22d, which was attended by representatives of institutions of learning in America and Europe and by many of the alumni and friends of the University.

The title of the Corporation, as now constituted, is The Trustees of Princeton University.

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OTHER UNIVERSITY OFFICERS.

EDWIN CURTIS OSBORN,
Treasurer.
Offices.

HENRY NEVIUS VAN DYKE, A.M.,
Registrar.
Offices.

HENRY GREEN DUFFIELD, A.B.,
Assistant Treasurer.
23 University Place.

ARNOLD EDWARD ORTMANN, PH.D., Jena,
Curator of Invertebrate Palæontology.
66 William St.

JOHN BELL HATCHER, PH.B.,
Curator of Vertebrate Palæontology.
76 Canal St.

GEORGE GOLDIE,
Director of Gymnasium.
35 University Place.

EDWARD HODGE BISHOP,
Organist.
9 Park St.

RUDOLPH WEBER,
University Draughtsman.
Nassau Hall.

JOHN WILLIAM TOPLEY,
Proctor.
9 Park St.

STANDING COMMITTEES OF THE FACULTY.

Library—Chairman—THE PRESIDENT.
Secretary—THE DEAN.

Schedule of Studies—Chairman—THE PRESIDENT.
Secretary—PROFESSOR WEST.

Weekly Schedules and Examinations—
Chairman—PROFESSOR THOMPSON.

Local Entrance Examinations—Chairman—THE PRESIDENT.
Secretary—PROFESSOR FINE.

Graduate Department—Chairman—THE PRESIDENT.
Secretary—PROFESSOR MAGIE.

Absences—Chairman—THE DEAN.

Examinations and Standing—Chairman—PROFESSOR WINANS.
Secretary—PROFESSOR HUMPHREYS.

Special Students—Chairman—PROFESSOR WILSON.
Secretary—PROFESSOR DANIELS.

Discipline—Chairman—THE DEAN.
Secretary—PROFESSOR WILSON.

Sanitary—Chairman—THE DEAN.
Secretary—PROFESSOR MAGIE.

Music—Chairman—PROFESSOR MARQUAND.

Out-Door Sports—Chairman—PROFESSOR SLOANE.
Secretary—PROFESSOR FINE.

Scholarships and Charitable Funds—
Chairman—PROFESSOR DUFFIELD.

Teachers and Schools—Chairman—PROFESSOR PACKARD.
Secretary—PROFESSOR WINANS.

Catalogue—Chairman—PROFESSOR MAGIE.
Secretary—PROFESSOR THOMPSON.

OFFICE HOURS.

THE REGISTRAR, University Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday.

THE TREASURER, University Offices, 9 to 1 and 2:30 to 4 daily, except Wednesday and Saturday; 9 to 12, Wednesday and Saturday; July 1 to September 1, 9 to 12 daily.

THE FACULTY meets at five o'clock on Wednesday afternoon. Communications from students should be in writing and should reach the Registrar before Wednesday noon.

THE COMMITTEE ON ABSENCES meets at noon on Wednesday. Requests and excuses should be presented by the student in person.

CLASS OFFICERS.

ACADEMIC.

Seniors, ... PROFESSOR WILSON, 50 Library Place.
Juniors, ... PROFESSOR DUFFIELD, 28 University Place.
Sophomores, . . . PROFESSOR PACKARD, College Place.
Freshmen, ... PROFESSOR WESTCOTT, Mercer Heights.
Special Students, . PROFESSOR FINE.

SCIENTIFIC.

Seniors, Juniors and Sophomores, B.S., and Special Students,
PROFESSOR CORNWALL, 51 Nassau Street.
Seniors, Juniors and Sophomores, C.E.,
PROFESSOR MCMILLAN, 40 Bayard Av.
Freshmen and first year Specials,
PROFESSOR ROCKWOOD, 84 Bayard Av.

FELLOWS.

Residence.

JOHN MOORE TROUT, A.B., 16 South Edwards Hall.
Chancellor Green Fellow in Mental Science.

LOUIS HERBERT GRAY, A.B., 35 Vandeventer Av.
Fellow in Classical Literature.

ROBERT LINCOLN LITCH, A.B., 7 North Edwards Hall.
Class of 1860 Fellow in Experimental Science.

STANLEY CHESTER REESE, A.B., 6 South Middle Reunion Hall.
J. S. K. Fellow in Mathematics.

EDWARD HODGE BISHOP, A.B., 9 Park St.
Boudinot Fellow in Modern Languages.

ROBERT MCNUTT MCELROY, A.B., 7 North Edwards Hall.
Boudinot Fellow in History.

———*
E. M. Biological Fellow.

ALFRED ABEL DOOLITTLE, A.B., 48 University Hall.
Class of 1877 University Fellow in Biology.

JOSEPH WILLIAM PARK, A.B., 32 Mercer St.
South East Club University Fellow in Social Science.

* No appointment.

ACADEMIC DEPARTMENT.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty Room in the University Offices the evening before the examination begins or on their arrival the following morning. Examinations for admission will be written, with supplementary oral examinations if needed. The first examination will begin in Princeton, on Thursday, June 17th, 1897, at 10 A. M. The second will begin on Tuesday, September 21st, 1897, at 10 A. M. Applicants who have any conditions or other deficiencies from the June examination are required to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations will also be held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha, Denver, Kansas City; and at preparatory schools and other cities when necessary. The places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission to any class, or as special students, must bring with them testimonials of good moral character, preferably from their last instructors, and if the candidate has been a

member of another college or university, he must produce a certificate from its President or Faculty that he is free from censure in that institution.

No candidate is admitted into the Undergraduate Department without examination and a vote of the Faculty.

Immediately after the beginning of the Academic year the students entering the Undergraduate Department meet according to announcement for matriculation and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other institution so long as we are members of Princeton University; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

Candidates for admission to the Freshman class will be examined in the books and subjects detailed below. It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

In the subjoined list of subjects, the following constitute the minimum requirements which are expected of all candidates: **1, 2, 3, 4, 5, 6; 12, 13, 14, 16** (or **15** or **17**); **20** (or **21**); **24, 25, 26, 27.**

Candidates who pass satisfactorily in certain of the other subjects, in addition to those enumerated above, may in this way secure advanced standing at the start in one or all of the subjects of instruction of the Freshman year. The requirements for advanced standing in each department are as follows:

In Latin: Two or more of **7, 8, 9, 10, 11** (one to be **7, 8** or **9**).

In Greek: Two or more of **15, 16, 17, 18, 19** (one to be **15, 16** or **17**, excluding the one offered as part of the minimum requirements).

In French: **22.** To be offered only by candidates offering **20.**

In German: **23.** To be offered only by candidates offering **21.**

In Mathematics: One and but one of **28, 29.**

Each applicant for admission or for preliminary examination should be provided with a statement, signed by his teacher, as to his fitness to be examined in each of the subjects specified in the following list. This statement is merely for the information of the examiners, and is in no sense an admission certificate. Proper blanks will be supplied in advance to teachers, upon application to the Registrar of the University.

1. *English.* The examination will be based upon the books prescribed by the uniform entrance requirements in English. Questions as to the subject matter, structure, and style of these books will be asked. Candidates must be prepared in all of the books required for the year of entrance. For 1897 the books prescribed are, for reading, Shakspere's As You Like It, De Foe's History of the Plague in London, Irving's Tales of a Traveller, Hawthorne's Twice Told Tales, and George Eliot's Silas Marner; for study, Shakspere's Merchant of Venice, Burke's Speech on Conciliation with America, Scott's Marmion, and Macaulay's Life of Samuel Johnson. For 1898 the books prescribed are, for reading, Milton's Paradise Lost, Books I and II. Pope's Homer's Iliad, Books, I, VI, XXII and XXIV, The Sir Roger de Coverley Papers, Goldsmith's Vicar of Wakefield, Coleridge's Rime of the Ancient Mariner, Southey's Life of Nelson, and Carlyle's Essay on Burns; for study, Shakspere's Macbeth, Burke's Speech on Conciliation with America, De Quincey's Flight of a Tartar Tribe, and Tennyson's Princess.

2. *Latin Grammar.* The inflections; the simpler rules for composition and derivation of words; syntax of cases and verbs; the structure of the sentence in general, with particular regard to relative and conditional sentences, indirect discourse and the subjunctive; so much prosody as relates to accent, versification in general and dactylic hexameter.

3. *Latin Composition.* Translation into Latin of easy continuous prose based upon Cæsar and Cicero.

Special attention is called to this requirement. It is strongly recommended that prose composition begin with the earliest study of Latin and be used continuously as the means for organizing the pupil's vocabulary under the forms of grammar. The writing of detached sentences should give place as soon as possible to practice in writing continuous prose, based chiefly or exclusively on definite

portions of Cæsar and Cicero, during the whole time when these authors are being read. Such exercises may be found in Collar's Practical Latin Composition and Daniell's Exercises in Latin Composition.

4. *Cæsar.* The first five books of the Gallic War.

5. *Virgil.* The first six books of the Æneid, including the prosody of hexameter verse.

6. *Cicero.* Nine orations, including the four against Catiline, the orations for Archias and the Manilian Law, and any other three, preferably to be selected from the orations for Milo, for Marcellus, for Ligarius, and the fourteenth Philippic.

7. *Ovid.* Selections from the Metamorphoses (2500 lines).

8. *Sallust.* The Catiline or the Jugurtha.

[7 or 8 may be offered in place of any three orations of Cicero.]

9. *Virgil.* The Eclogues and Georgics, or the last six books of the Æneid.

10. *Latin Sight Translation.* Sight translation into English from easy Latin prose writers, such as Cornelius Nepos, Aulus Gellius, Quintus Curtius and Eutropius.

11. *Roman History and Geography.* The history of Rome down to the battle of Actium. The ancient geography of Italy and Gaul and the topography of the city of Rome.

12. *Greek Grammar.* The topics for examination in Greek grammar are similar to those enumerated under Latin grammar. Special stress is laid upon a thorough knowledge of the noun and verb inflections.

13. *Greek Composition.* Simple sentences and easy continuous discourse based upon Xenophon's Anabasis, chiefly to test the candidate's knowledge of accent, inflection and the fundamental rules for the syntax of the noun and verb.

14. *Xenophon.* The first four books of the Anabasis.

15. *Xenophon.* The fifth, sixth and seventh (chapters i–iii) books of the Anabasis.

16. *Herodotus.* The seventh book of the History (sections 1–60 and 172–239).

17. *Homer.* The first three books of the Iliad.

18. *Greek History and Geography.* The history of Greece down to the end of the Peloponnesian War. The ancient geography of Greece and Asia Minor.

19. *Greek Sight Translation.* Sight translation into English from easy Greek prose, such as the writings of Xenophon.

20. *Elementary French.* Translation at sight of easy French prose into English and of easy English exercises into French. Rudiments of grammar, including the irregular verbs. (So much as is in Whitney's Brief French Grammar, or Whitney's Practical French Grammar, Part I, or Edgren's, Part I.) Super's Reader, or Whitney's, is recommended, or an equivalent amount of reading.

21. *Elementary German.* Translation at sight of easy German prose into English and of easy English exercises into German. Rudiments of grammar, comprising declension of nouns; conjugation of auxiliary, regular, and irregular verbs; separable and inseparable verbs; declension and comparison of adjectives; pronouns; the most frequent prepositions; numerals; the principles of the normal, inverted and transposed order. Fifty pages of easy prose: Grimm's Märchen or Meissner's Aus meiner Welt.

Either **20** or **21**, but not both, are to be offered.

22. *Advanced French.* Dumas: La Tulipe Noire, and Daudet: Lettres de mon Moulin. Translation into French of English exercises based on these books.

23. *Advanced German.* Five cantos of Goethe's Hermann und Dorothea, *or* Chamisso's Peter Schlemihl. Harris's German Composition: Introductory Selections and Easy Narrative Selections. (Parts I, II.)

24. *Arithmetic.* Including only greatest common divisor and least common multiple; vulgar and decimal fractions; percentage apart from its commercial applications; square root; the metric system of weights and measures. Special emphasis is laid upon accuracy and facility in reckoning.

25. *Plane Geometry.*

26. *Algebra.* Through quadratic equations involving two unknown quantities,—including radicals and fractional and negative exponents.

27. *Algebra.* Indeterminate equations of the first degree, ratio and proportion, variation, arithmetical and geometrical progression, undetermined coefficients and the binomial theorem.

28. *Solid and Spherical Geometry.*

29. *Logarithms and Plane Trigonometry.*

PRELIMINARY EXAMINATIONS.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate, unless he passes in at least four subjects, nor will the preliminary certificate be granted to any candidate more than once. English, Latin Grammar, Latin Composition, Greek Grammar and Greek Composition, Algebra **27** may not be tried at the preliminary examination. Elementary French or German may not be tried at the preliminary examination unless the candidate expects to offer **22** or **23** the next year.

ADMISSION TO SPECIAL COURSES.

In exceptional cases, students, not members of any one of the four regular classes nor candidates for a degree, are admitted to the privileges of the University, and allowed to take special undergraduate courses, selected under the direction of the Faculty, in such a manner as to secure full and profitable employment of their time. Such special students undergo an entrance examination sufficient to ascertain their preparation for the courses proposed, and are subject to the same regulations and discipline and to the same examinations in the studies pursued, as other undergraduates. These special courses, however, are not offered to those who have failed in the regular course.

When special students are finally leaving college, professors may authenticate for them such studies as they have pursued in their respective departments; and certificates of proficiency, signed by the President and Registrar, may be granted them on report by the Committee on Special Students that they have completed the courses on their schedule.

SOPHOMORE, JUNIOR AND SENIOR ENTRANCE REQUIREMENTS.

Candidates for admission to the Sophomore class who have not completed the studies of the Freshman year at another approved institution must first pass an examination on the studies required for admission to the Freshman class.

Candidates for admission to the Sophomore, Junior or Senior class, when coming from another institution, are examined only in the studies of the year preceding that which they wish to enter,

provided they present evidence that they have passed satisfactory examinations on the previous studies of the curriculum and entrance requirements, or their equivalents.

A candidate coming from an undergraduate class in an approved institution may be allowed, at the discretion of the Faculty, to enter the next lower class in this University, without examination, provided he presents satisfactory certificates from his former institution.

The studies of the Freshman year are Latin, Greek, Mathematics, English, French or German. For admission to the Sophomore class, candidates will be examined on the following minimum amounts or equivalents.

In Greek: Xenophon's Hellenica, Books I-II; Herodotus, 60 pages, exclusive of any part offered for entrance to the Freshman class; Thucydides, Book II, or an equal amount.

In Latin: Terence, one play; Livy, books I and XXI or XXII; Cicero, *De Senectute;* Roman History; Prose Composition based on Livy, book I.

In Mathematics: Algebra completed and Elementary Theory of Equations; Solid Geometry; Plane Trigonometry.

In English: Hunt's Discourse, pp. 19-150, or equivalent.

In French or German: The elements of one of these languages.

The studies of Sophomore year include the following required subjects: Latin, Greek, Mathematics, Mechanics, English, History, Chemistry, Zoology and Botany; and the following elective studies, of which two must be taken: Latin, Greek, Mathematics, French, German. While it is desirable that the candidate for the Junior year shall have some knowledge of Botany and Zoology, yet examination in these studies is not required.

The required studies of Junior year are Psychology, Physics, Logic, and Political Economy. Five elective studies in the first term and four in the second term are to be chosen from the departments of Philosophy, Language and Literature, Mathematics and Natural Science.

At the discretion of the Faculty, the Bachelor of Arts diploma of an approved institution may be taken in place of the examination for entrance to the Senior year.

No person is admitted to the University as a candidate for the degree of Bachelor of Arts after the beginning of the first term of the Senior year.

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

Regular Examinations.—At the end of each term each class is ordinarily examined in the studies of that term. At the close of the second term the examination in certain subjects may embrace not only the work of that term, but the course of the entire year.

Partial Examinations and Written Recitations.—In addition to the regular examinations, partial examinations or written recitations are held from time to time during the term.

Divisional Examinations.—In the Freshman class, special examinations are held early in the first term, the results of which determine the distribution of the class into graded divisions. These are reorganized at the beginning of the second term according to the results of the last preceding regular examinations.

General Regulations.—Examinations are for the most part conducted in writing, but in certain subjects are oral in whole or in part. Private examinations are not allowed except in extreme cases and by special permission of the Faculty. Absence from an examination, except for reasons of absolute necessity, will be regarded as a serious delinquency.

Regulations Respecting Conditions and Absence from Examinations.

1. *Absence* from any examination, regular or special, counts as a failure.

Excuses for absence from examinations must be rendered in person to the Committee on Absences at their first meeting after the student returns to duty.

2. A student is likewise conditioned when *excluded* from an examination.

Rule—A student who is absent from more than one-sixth of the exercises of any course, and whose work is otherwise unsatisfac-

tory, may be excluded by the instructor from the examination in that course.

3. A student who is conditioned in *half or more of his work for a term* is dropped from his class, and must either withdraw from the University, or with permission of the Faculty enter the next lower class.

4. A student who receives conditions amounting to *less than half the work of a term* is given opportunity to remove them,—first term conditions in the fifth week of the second term, second term conditions in the first week of the Academic year in September.

5. A student who fails to remove his conditions at the first opportunity is granted a second opportunity—on first term conditions in the first week of the Academic year in September, on second term conditions in the sixth week of the Academic year. In case of Seniors the second opportunity on first term conditions will be given in June. For these examinations the student must employ a tutor and present a certificate of preparation and pay the fee of Section 8.

6. A student who fails at the second opportunity to remove conditions is required to repeat the courses in which he is deficient with the next lower class, and is enrolled with that class in the Catalogue until all deficiencies are made up.

7. A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

8. For every examination upon a deficiency after the first opportunity the student is required to pay a fee of $5 into the University treasury, to be applied to the Library Fund.

9. In the application of these regulations, special cases, arising from illness or other causes, will be duly considered by the Faculty. Requests to be relieved from the operation of any of these regulations must be made in writing.

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the

student. The maximum mark in each study is one hundred; the minimum or passing mark is fifty.

The Rank in each Department is determined by the instructor, who computes from the recitations and examinations the marks of the class and divides the class into groups in the order of merit.

The Senior and Junior classes are divided into four groups.

The first group indicates very high standing and contains not more than $\frac{1}{5}$ of the entire class.

The second group indicates high standing and contains not more than $\frac{4}{10}$ of the entire class.

The third group ndicates medium standing and contains not more than $\frac{1}{5}$ of the entire class.

The fourth group indicates low standing and contains the remainder of the class, except those not fully examined.

The Sophomore and Freshman classes are divided into six groups.

The first group indicates very high standing and contains not less than $\frac{1}{10}$ or more than $\frac{1}{10}$ of the entire class.

The second group indicates high standing and contains not more than $\frac{1}{5}$ of the entire class.

The third group ndicates high medium standing and contains not more than $\frac{1}{4}$ of the entire class.

The fourth group indicates medium standing and contains not more than $\frac{1}{5}$ of the entire class.

The fifth group indicates low standing and contains not more than $\frac{1}{5}$ of the entire class.

The sixth group ndicates very low standing and contains the remainder of the class, except those not fully examined.

The General Rank of a student is determined by combining his group numbers in the several departments in proportion to the allotted schedule time of each. The students whose averages are highest, and above an established limit, are assigned to the first general group; those next highest to the second general group; and so on hrough the general groups.

In determining a student's standing, essays count as one hour per week throughout each of the four years. Account is taken of attendance and conduct as well as scholarship, according to the published rules of the Faculty.

A report of the standing of each student is made to his parent or guardian by the Registrar at the close of the first term and at the close of the year. The latter report gives also the standing for the whole year.

GRADUATION.

Bachelor's Degree.

Students who pass their final examinations are ordinarily recommended by the Faculty for the degree of Bachelor of Arts, and if the recommendation is approved by the Trustees, the degree is conferred at Commencement, and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

No student will be recommended to the Trustees for a degree who fails to pass the examinations at the close of the last term of the Senior year.

Any member of the Senior class who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

Final Rank and Graduation Honors.

The final rank of members of the graduating class is computed by combining the averages for the several years of the course, except that the average for the Freshman year is omitted in those cases in which it would lower the standing of the student. The Faculty then determines what portion of the class shall be printed as the Honor List—the names of the members of each group being printed in alphabetical order. Special Honors in particular departments are also awarded.

The first and second general groups thus determined are the Honor groups of the graduating class, and are designated *magna cum laude* and *cum laude*, respectively.

The higher distinction of *insigni cum laude* and the highest, of *summa cum laude*, are reserved for very unusual excellence.

Commencement Speakers.

The student whose individual rank is highest, is ordinarily awarded the Latin Salutatory by vote of the Faculty. In like manner the student whose individual rank is the next highest receives the English Salutatory. The Valedictory is awarded with special regard to the qualifications of the student as a valedictorian, as well as on the ground of scholarship. Five others out of sixteen recommended by the Baird Prize Committee deliver English Orations, usually in the order of their scholarship.

In the award of all degrees and honors, regard is had to the conduct of the student during his course, and any student who has incurred serious discipline may be debarred from the rank to which otherwise his scholarship would have entitled him.

UNDERGRADUATE COURSE OF STUDY.

The course for the degree of Bachelor of Arts extends through four academic years and embraces instruction in the three departments of Philosophy, Language and Literature, Mathematics and Natural Science.

It includes two classes of studies, the required and the elective. The required studies are regarded as fundamental and essential in a liberal education and therefore are not left to the student's option. The elective studies, though important, are not all indispensable and accordingly are left, within definite limits, to the student's choice. Attendance upon all elective courses, when once chosen, as well as upon all required courses, is obligatory. In connection with some departments there are also optional courses, with voluntary attendance.

Most of the studies of the Freshman year are required, and include Latin, Greek, Mathematics, and English. The student elects between French and German. If he has fulfilled only the minimum requirement for entrance (20 or 21), he must continue the study of the language in which he was examined; if he has fulfilled the advanced requirement (22 or 23), he may either continue the study of that language, or begin the study of the other.

In the Sophomore year the studies are substantially all required. They include Latin, Greek, Mathematics, and English, continued from the Freshman year, and, in addition, General History, Mechanics, Chemistry, Zoology and Botany. Opportunity is also given in elective courses in Latin, Greek, Mathematics, French, and German, for the student to extend his required work in any two of these directions.

In the Junior year the elective system more properly begins. About one-third of the student's time is occupied with required studies, which are Psychology, Logic, Political Economy, Physics. In addition to these the student chooses five elective

courses in the first term and four in the second term, some of them open only to Juniors and others to Juniors and Seniors.

In the Senior year the range of electives is wider, the required studies being Ethics and Evidences of Christianity. Besides these the student selects six elective courses of study.

The various elective courses for Sophomores, Juniors and Seniors are detailed on the following pages.

To prevent confusion and secure intelligence of choice on the part of students, the electives are arranged systematically. As a rule no elective course is introduced until the student has passed through a required course in the same general department of study. The Sophomore electives are extensions of subjects already familiar to the student in the required courses, and the Junior and Senior electives, though largely new studies, are preceded by suitable required courses.

A further inducement to coherency in choice is found in the provision for Honors. Apart from the General Honors awarded for general excellence, there are Special Honors in the leading departments, in both required and elective studies. The effect of this is to concentrate choice upon cognate studies. The General and Special Honors are described after the Exhibit of Studies.

In the two lower years the instruction is conducted mainly by recitations. The Freshmen and Sophomores recite in four, five, six, or seven divisions, constituted according to rank and according to their degree of proficiency in the leading studies. They are divided separately for the classics, mathematics, and modern languages. As the work is thus proportioned to individual ability, rapid progress can be made by those who have special aptitude for certain studies.

Optional courses, so ordered as not to conflict with the time allotted to the regular instruction of the course, are offered in connection with several departments, under such restrictions as may be prescribed by the Faculty. These courses are designed to benefit those who wish to extend their reading or study in certain branches; they amplify the subjects taken up in the regular course, and in some cases conclude with a special examination upon which is based a certificate of proficiency. A student may take not more than two optional courses at one time; and only one course, if that course occupies more than two hours weekly.

In awarding the Bachelor's degree, and assigning the final rank, the student's work for the whole four years is taken into account.

REGULATIONS REGARDING THE CHOOSING OF ELECTIVES.

Students are required to choose their elective studies for the first term at the beginning of that term, and no changes will be allowed after the close of the third week, and none before that time, except for special reasons approved by the Faculty.

Students are required to hand in writing to the Registrar, on or before the third Monday in January, their choice of electives for the second term, and no changes will be allowed after that date, except for special reasons approved by the Faculty.

If a student be in the lowest group in any department he shall have liberty to choose his elective studies only in departments in which his previous standing has been above that group. If he desire any other elective studies he shall send in his proposed list of such studies to the Faculty for approval, and if his choice be not approved, the Faculty shall assign him his electives.

STATEMENTS OF COURSES.

DEPARTMENT OF PHILOSOPHY.

Mrs. Robert L. Stuart, of New York, gave the University one hundred and fifty-four thousand dollars, to maintain professorships in the Department of Philosophy, embracing Ethics, Logic, Metaphysics, History of Philosophy and Psychology. She gave this in memory of her husband, the late Mr. Robert L. Stuart, and of his brother, the late Mr. Alexander Stuart.

The Professorships now established on this foundation are those of Psychology and History of Philosophy, Ethics, and Mental Science and Logic.

(In the following statements of courses, the numbers in brackets indicate the number of exercises a week.)

I. Moral and Religious Philosophy.

THE PRESIDENT AND PROFESSOR SHIELDS.

1. Ethics. Theoretical and practical ethics, the foundation of moral obligation, the will, conscience, the nature of virtue, and the

moral law. Recent ethical discussions. Lectures. Senior Required; first term [2]. The President. *Calderwood:* Handbook of Moral Philosophy.

2. Evidences of Christianity. An exhibition or outline of the exceptional evidence that accredits the Christian religion; to show that Christianity is and that anti-Christian systems are not capable of rational defence. Senior Required; second term [1]. The President.

4. Harmony of Science and Religion. With a view to the scientific evidences of Christianity, and the purification and completion of philosophy. Senior Elective; second term [2]. Professor Shields. Lectures by the Professor, and extemporaneous essays by the student.

5, 6. (Latin 13, 14.) Lucretius, De Rerum Natura, and Cicero, De Natura Deorum. Senior Elective; both terms [2]. Professor Packard.

7, 8. Theism. Senior Elective; both terms [2]. The President.

9. Science and Religion. The history and the logic of the sciences with reference to emerging problems of religion. Graduate course; second term [2]. Professor Shields. Lectures.

II. Mental Philosophy.

PROFESSORS ORMOND, BALDWIN, HIBBEN AND WARREN, DR. HODGE AND DR. TAWNEY.

1. Psychology. The elements of psychology, treating of the cognitive and motive powers. Junior Required; first term [2]. Professor Ormond and Dr. Hodge. Lectures and recitations. *McCosh:* Cognitive and Motive Powers. *Baldwin:* Elements of Psychology.

2. Elements of Logic. Junior Required; second term [3]. Professor Hibben. Lectures. *McCosh:* Deductive Logic. *Hibben:* Inductive Logic.

§ 1. History of Ancient Philosophy. Greek and Roman philosophy to close of Pagan Schools. Given 1897–98, alternating with § 11. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures. *Zeller:* Outlines of Greek Philosophy; *Windelband:* History of Philosophy.

4 I. History of Medieval Philosophy, embracing the patristic and scholastic periods and ending with Francis Bacon. Given 1897–98, alternating with 4 II. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Ueberweg*, *Erdmann*, *Windelband*.

8 II. History of Modern Philosophy. Philosophy from Descartes to Kant. Given 1896–97, alternating with 8 I. Junior and Senior Elective; first term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.

4 II. History of Modern Philosophy. Philosophy since Kant. Given 1896–97, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.

The courses 8 I, 4 I, 8 II, 4 II furnish a continuous course of lectures on historical philosophy running through two years.

6. Experimental Psychology. Introduction to the subject. The method, scope, and most general results of the experimental treatment of the mind, considered especially in its connection with general psychology, education, and medicine. Special demonstrations, in the laboratory, of contrast, fatigue, habit, etc. Junior Elective; second term [2]. Professor Warren and Dr. Tawney. *Ribot:* German Psychology of To-day. *Sanford:* Course in Experimental Psychology.

A fee of $2 is charged to cover the cost of material used in this course.

8. (Greek 10.) The Phaedo of Plato, and lectures on the Platonic philosophy. Junior and Senior Elective; second term [2]. Professor Orris.

9. Inductive Logic and General Theory of Logic. Senior Elective; first term [2]. Professor Hibben. *Mill:* Logic. Lectures.

10. Symbolic Logic and Theory of Probability. Senior Elective; second term [2]. Professor Hibben. Lectures.

11. (Greek 13.) Aristotle, the Nicomachean Ethics, with prolegomena and dictations. Senior Elective; first term [2]. Professor Orris.

13. Metaphysics and Theory of Knowledge. Lectures. Senior Elective; first term [2]. Professor Ormond. *McCosh:* First and Fundamental Truths.

14. Outlines of Philosophy. A course in encyclopedia of philosophy. Senior Elective; second term [2]. Professor Ormond. Lectures.

15. Physiological Psychology. Lectures and laboratory work on the anatomy and physiology of the nervous system in their bearing upon the problems of psychology. Senior Elective; first term [2]. Professors Scott and McClure and Mr. Dahlgren. *Ladd:* Physiological Psychology.

16. The Psychology of Logic. Lectures on the psychological basis and postulates of logic; theories of leading psychologists and logicians. Senior Elective; second term [2]. Professor Warren.

17. Experimental Psychology. The psychology of the special senses (sight, hearing, touch, etc.) experimentally treated. The second half of this course treats of the higher processes, memory, association, action, thought, as far as they can be approached experimentally, with the theory of their physical basis. Senior Elective and Graduate course; first term [2]. Professors Baldwin and Warren. Lectures, demonstrations, and practical work in the laboratory (required of all students in this course).

18. Experimental Psychology. Detailed treatment by lectures and demonstrations of the measurement of mental intensities (Weber's law) and of the results of mental chronometry. Senior Elective and Graduate course; second term [2]. Professors Baldwin and Warren. References: *Wundt, Külpe, Jastrow.*

A fee of $5 is charged in each of courses 17 and 18 to cover the cost of material used.

19, 20. General Psychology. Advanced course. First term: Senses and Intellect; second term: Feeling and Will, with consideration of abnormal mental conditions. Senior Elective and Graduate course; both terms [2]. Professor Baldwin. References: *James, Wundt, Ladd, Baldwin.*

21, 22. Selected Topics in Philosophy. Graduate course; both terms [2]. Professor Ormond. Lectures.

23, 24. (Greek 15, 16.) Plato; analyses of his dialogues, lectures on his philosophy, reading of the Phædo and parts of the Republic. Graduate course; both terms [1]. Professor Orris.

25, 26. Experimental Psychology. Consisting largely in research work. Graduate course; both terms [2]. Professors Baldwin and Warren and Dr. Tawney.

27, 28. Modern and Contemporary Philosophy. Graduate Seminary; both terms [2]. Readings, discussions and theses. This course is also open as an elective to those Seniors who are candidates for Special Honors in Philosophy. Professor Ormond.

29, 30. Graduate Psychological Seminary. Open as an optional to Seniors of the first and second groups who elect 21 or 22; both terms [1]. Professor Baldwin. Subject for 1896–97: Social and Genetic Psychology.

31. Theory of Mental Measurements. Graduate course; first term [2]. Professor Warren.

III. History and Political Science.

PROFESSOR SLOANE, MR. CONEY, AND MR. WYCKOFF.

1 a. (Latin 3b.) Roman History. Freshman Required; first term [1]. Mr. Carter.

1 b. (A portion of Greek 1, 3.) Greek History. Freshman Required; first term. Mr. Robbins and Mr. Prentice.

3. General History. Sophomore Required; first term [2]. Mr. Coney. *Freeman:* General Sketch of History.

5. a. Ancient Oriental History. b. Institutions of Greece and Rome. Lectures and discussions. Junior Elective; first term [2]. Professor Sloane.

7. a. Medieval History. b. European History to the end of the seventeenth century. Lectures and discussions. Junior Elective; first term [2]. Mr. Coney.

9. Constitutional and Political History of England since 1688. Senior Elective; first term [2]. Professor Sloane.

10. American Political History. Senior Elective; second term [2]. Professor Sloane.

a. The Science of History. Six lectures. Junior and Senior Optional; second term [1]. Professor Sloane.

11 I. The Nation. Its origin, nature, and functions. Given 1897–98, alternating with 11 II. Senior Elective; first term [2]. Professor Sloane.

11 II. The History of Political Theories. Given 1896–97, alternating with 11 I. Senior Elective; first term [2]. Professor Sloane.

12. Modern European History, with special reference to the consolidation of the German States. Senior Elective; second term [2]. Mr. Coney.

13. Parliamentary and Congressional Government. Graduate course; second term [2]. Professor Sloane. *Bryce:* The American Commonwealth.

14. Historical Seminary. Open to Graduates and Senior Honormen; second term [2]. Professor Sloane.

16. Sociology. An historical review of the evolution of modern industrialism. A critical analysis of the principal theories of social reconstruction. The genesis and development of a science of sociology. A review of the methods and results of sociological study. Senior Elective and Graduate course; second term [2]. Mr. Wyckoff. Lectures and recitations.

IV. Jurisprudence.

PROFESSOR WILSON.

1 I. Outlines of Jurisprudence: an exposition of Jurisprudence as an organic whole, exhibiting the nature of its subject-matter, its relationship to cognate branches of study, the inter-relationship of its several parts to each other, and their proper function and aim. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 1 II. Given 1897–98. Professor Wilson. *Pollock:* A First Book of Jurisprudence.

2 I. International Public Law. Text-book, lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 2 II. Given 1897–98. Professor Wilson. *Lawrence:* The Principles of International Law.

1 II. General Public Law: its historical derivation, its practical operation and sanction, its typical outward forms, its evidence as to the nature of the state and as to the character and scope of political sovereignty. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 1 I. Given 1896–97. Professor Wilson. *Boutmy:* Studies in Constitutional Law; *Wilson:* The State.

2 II. American Constitutional Law. Lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 2 I. Given 1896–97. Professor Wilson. *Cooley:* American Constitutional Law; and *A. V. Dicey:* The Law of the Constitution.

3. History of Law: in general, and as exhibited in the growth of typical national systems. Lectures and collateral reading. Re-

stricted Senior Elective; first term [2]. Professor Wilson. *Maine:* Ancient Law.

Open only to Academic Seniors who take or have taken course 1 1. Those who wish to take this course are advised to consult with Professor Wilson before concluding their choice.

4. The Development of English Common Law: the genesis, growth, character, and general principles of English law. Lectures and collateral reading. Restricted Senior Elective; second term [2]. Professor Wilson.

Open only to Academic Seniors who have taken courses 1 1 and 3.

5, 6. (Latin 17, 18.) Roman Law. Readings, lectures, and recitations. Senior Elective, open to graduate students; both terms [2]. Professor Westcott. *Justinian:* Institutes.

7, 8. (Latin 21, 22.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

V. Political Economy.

PROFESSOR DANIELS.

2. Political Economy. The Elements of Economics. Junior Required; second term [3]. Lectures and recitations. Professor Daniels. *Hadley:* Political Economy.

3. Finance. An exposition of the principles of Public Finance, including monetary problems. Senior Elective; first term [2]. Lectures. Professor Daniels. *Bastable:* Public Finance.

4. History of Political Economy. Lectures, conferences and collateral reading. Senior Elective; second term [2]. Professor Daniels. *Ashley:* Economic Classics.

VI. Archæology and the History of Art.

PROFESSORS PRIME, MARQUAND AND FROTHINGHAM, AND MR. BUTLER.

PUBLIC LECTURES: Provision will be made for a short course of public lectures by the professors of the department.

1. Ancient Art, a general course on the art of ancient Egypt, Assyria, Phoenicia, Greece, and Rome. Junior and Senior Elective; first term [2]. Mr. Butler. *Reber:* History of Ancient Art.

2. Medieval Art, a general course on early Christian, Romanesque, and Gothic art. Junior and Senior Elective; second term [2]. Professor Frothingham. *Reber:* History of Medieval Art.

3. Etruscan and Roman Art. Senior Elective and Graduate course; first term [2]. Professor Frothingham. Lectures.

4. History of Sculpture. Senior Elective and Graduate course; second term [2]. Professor Frothingham. Lectures.

5. Early Christian and Romanesque Architecture. Senior Elective and Graduate course; first term [2]. Mr. Butler. Lectures.

6. Gothic and Renaissance Architecture. Senior Elective and Graduate course; second term [2]. Mr. Butler. Lectures.

Courses in Greek Architecture, Greek Industrial Arts, Greek Mythology in Art, also in Christian Architecture, Gothic Architecture, the subjects and symbols of Christian Art, Medieval Industrial Arts, and Renaissance Architecture and Sculpture have been given and may be expected in future years.

School at Rome.

This University has been interested in the recent establishment of the American School of Classical Studies in Rome. This School affords facilities for archæological and classical advanced study and investigation in Italy for both the Ancient and Christian periods. Approved graduates of this University are entitled to all its advantages free of tuition and may compete for its three Fellowships, two of $600 and one of $500. Professor Frothingham is Secretary of the School.

DEPARTMENT OF LANGUAGE AND LITERATURE.

VII. Greek.

Professors Cameron, Orris, and Winans, Mr. Robbins and Mr. Prentice.

1, 3. Xenophon: Hellenica I–II. Greek Grammar and Composition. Greek History. Freshman Required; first term [4]. Mr. Robbins and Mr. Prentice. *Blake:* Hellenica. *Oman:* History of Greece.

2. Herodotus: Selections, Sight Reading. Freshman Required; second term [2]. Professor Winans and Mr. Robbins. *Merry:* Herodotus, and *Teubner text.*

4. Thucydides: Selections. Freshman Required; second term [2]. Mr. Prentice. *Marchant:* Thucydides II, and a text.

a. Extra and sight reading. Freshman Optional; part of both terms [1]. Mr. Prentice.

5a, 6a. Demosthenes: The Olynthiacs and Philippics, the life of Demosthenes and the political condition of Greece in his time. Plato: The Apology and Crito. Greek prose composition on the basis of the text read during the year. Sophomore Required; part of class, both terms [2]. Professor Orris.

5b. Xenophon: Memorabilia and Symposium. Sophomore Required; part of class, first term [2]. Professor Winans or Mr. Robbins. *Winans:* Memorabilia, Symposium.

6b. Attic Orators: Selections, Development of Greek oratory. Sophomore Required; part of class, second term [2]. Mr. Robbins. *Jebb:* Selections from the Attic Orators. *Morgan:* Lysias.

7. Euripides: Medea. Lectures on Greek drama and theatre. Sophomore Elective; first term [2]. Professor Cameron.

8. Lucian's Dialogues. Sophomore Elective; second term [2]. Professor Winans. *Williams:* Selections from Lucian.

9 I. Homer's Odyssey. Twelve books. Lectures. Given 1897–98, alternating with 9 II. Junior and Senior Elective; first term [2]. Professor Winans. *Merry:* Odyssey, or *German text.*

9 II. Aristophanes: two comedies. Lectures on comedy and on Aristophanes and his works. Given 1896–97, alternating with 9 I. Junior and Senior Elective; first term [2]. Professor Winans. *Merry:* Clouds (or Wasps). *Merry* or *Green:* Frogs.

10. (Ment. Phil. 8.) Plato: The Phædo, with lectures on the Platonic philosophy; or, Æschylus: The Agamemnon, with lectures on the Attic Drama. Junior and Senior Elective; second term [2]. Professor Orris.

11, 12. Sophocles: Œdipus Tyrannus. Greek Literature. Lectures. Senior Elective; both terms [2]. Professor Cameron.

13. (Ment. Phil. 11.) Aristotle: The Nicomachean Ethics, with prolegomena. Senior Elective; first term [2]. Professor Orris.

14. Greek Lyric Poets. Lectures. Senior Elective; second term [2]. Professor Winans.

15, 16. (Ment. Phil. 23, 24.) Plato: his life and works, analysis of his dialogues, lectures on his philosophy, reading of the

Phædo and the Republic. Graduate course; both terms [1]. Professor Orris.

17, 18. Greek Historians. Critical study. Graduate course; both terms [2]. Professor Winans.

19, 20. Greek Dialects. Inscriptions and Homer. Graduate course; both terms [2]. Mr. Robbins. *Cauer:* Delectus.

21, 22. Greek Writers of the Early Christian Centuries, with special reference to the idioms of post-classical Greek. Graduate course; both terms [1]. Mr. Prentice. *Gildersleeve:* Justin Martyr.

School at Athens.

The University, in connection with others, assisted in establishing and contributes to the support of the American School of Classical Studies at Athens. This school affords facilities for archæological and classical investigation and study in Greece, and approved graduates of this University are entitled to all its advantages free of tuition. Professor Sloane represents Princeton in its Managing Committee.

VIII. Latin.

Professors Packard, West, and Westcott, Mr. Smith and Mr. Carter.

1. Livy: Books I, XXI and XXII. Freshman Required; first term [3]. Professor Westcott and Mr. Smith. *Westcott:* Livy.

2. Terence: Andria, Adelphoe or Phormio. Aulus Gellius: selections. Freshman Required; second term [2]. Professor Westcott.

3. Latin Prose Composition. Freshman Required; first term [1]. Mr. Carter. Exercises based upon Livy.

4a. Cicero: De Senectute. Freshman Required; second term [1]. Mr. Smith. *Kelsey:* Cicero.

4b. Roman History. Freshman Required; second term [1]. Mr. Carter.

a. Sight reading of various authors. Freshman Optional; both terms [1]. Professor Westcott.

5a. Cicero: De Officiis, with occasional lectures. Sophomore Required; part of class, first term [2]. Professor Packard. *Chase and Stuart.*

5b. Horace: Odes. Sophomore Required; part of class, first term [2]. Mr. Carter. *Page:* Horace.

5c. Cicero's Letters, Epistolae Selectae. Sophomore Required; part of class, first term [2]. Mr. Smith. *Tyrrell:* Cicero in his Letters.

6a. Cicero: Tusculan Disputations. Sophomore Required; part of class, second term [2]. Professor Packard. *Chase and Stuart.*

6b. Horace: Odes. Catullus, selections. Sophomore Required; part of class, second term [2]. Mr. Carter. *Page:* Horace. *Simpson:* Selections from Catullus.

7a. Tacitus: Agricola. Martial, selections. Sophomore Elective; first term [2]. Mr. Smith. *Church and Brodribb:* Tacitus.

7b. The period of the Civil Wars, 49 to 31 B. C., studied from original sources. Honor course, restricted (substitute for 7a). Sophomore Elective; first term [2]. Professor Westcott.

8a. Quintus Curtius: History of Alexander the Great. Sophomore Elective; second term [2]. Mr. Smith. *Crosby:* Quintus Curtius.

8b. The Reign of Tiberius with special attention to the Annals of Tacitus and the Historia of Velleius Paterculus, and including an elementary course in Epigraphy. Honor course, restricted (substitute for 8a). Sophomore Elective; second term [2]. Professor Westcott. *Allen:* Tacitus. *Rockwood:* Velleius Paterculus.

b. Latin Prose Composition. Sophomore optional, both terms [1]. Professor Westcott.

9. Juvenal's Satires, and selected Letters of Pliny; lectures upon the moral and religious aspect of the Earlier Empire. Junior and Senior Elective; first term [2]. Professor Packard. Any accepted edition or text.

10. Seneca's Epistolæ ad Lucilium. Lectures continued, with added work and thesis on selected portions of Seneca's other writings. Junior Elective; second term [2]. Professor Packard. *Teubner text.*

12. Plautus: Seven selected plays. Lectures on the history of Latin comedy. Junior Elective; second term [2]. Mr. Carter.

13. (Moral Phil. 5.) Lucretius: De Rerum Natura, together with Cicero: De Natura Deorum, Book I; lectures illustrative

of the subject. Senior Elective; first term [2]. Professor Packard. *Harper's texts.*

14. (Moral Phil. 6.) Cicero: De Natura Deorum, Books II, III, with selected readings from De Divinatione, and De Fato; lectures. Senior Elective; second term [2]. Professor Packard. *Harper's texts.*

15. The Roman Elegy in the Augustan Age. Selected reading from Tibullus, Propertius, and Ovid. Lectures on the history of elegiac poetry. Senior Elective; first term [2]. Mr. Carter.

16. The Satires and Epistles of Horace. Lectures and recitations. Senior Elective; second term [2]. Mr. Carter.

17. (Jur. 5.) Roman Law: lectures and recitations. Senior Elective, open to graduates; first term [2]. Professor Westcott. *Sohm:* Institutes of Roman Law.

18. (Jur. 6.) Roman Law. Senior Elective, open to graduates; second term [2]. Professor Westcott. The Institutes of Justinian.

19, 20. Selections from Tertullian, Lactantius and Augustine. Graduate course; both terms [1]. Professor Packard.

21, 22. (Jur. 7, 8.) Sources of Early Roman Law. Graduate course; both terms [1]. Professor Westcott. *Bruns:* Fontes Juris Romani Antiqui.

23. Apuleius. Selections from the Metamorphoses, studied with special reference to African Latinity. Graduate course; first term [1]. Mr. Carter.

24. Petronius. Reading of the Cena Trimalchionis, with special attention to the private life of the Romans. Graduate course, second term [1]. Mr. Carter.

The Latin seminary is temporarily located in the University Offices building.

IX. Sanskrit.

PROFESSOR WINANS AND MR. ROBBINS.

1, 2. Beginners' course. Grammar; exercises; easy reading, such as Nala, or the Sâvitrî episode from the Mahâbhârata; Hitopadeça, etc. Comparison of forms. Senior Elective and Graduate course; both terms [2]. Professor Winans or Mr. Robbins.

Perry: Primer, or *Geiger:* Elementarbuch; *Lanman:* Reader; *Whitney:* Grammar.

3, 4. A second year's course in Sanskrit with more extended reading, and with special attention to comparative grammar. Professor Winans.

5, 6. For students of Comparative Grammar a course is offered in Avestan and Old Persian. Graduate course [2]. Mr. Robbins. *Jackson:* Avesta Grammar and Reader. *Spiegel:* Die Alt-Persischen Keil Inschriften.

X. English.

THE DEAN AND PROFESSORS HUNT AND PERRY.

1, 2. (Oratory 1, 2.) Elocution; combined with Rhetoric; Freshman Required; both terms [2]. Professor Perry.

4. Advanced Discourse and English Style. Sophomore Required; second term [2]. Professors Hunt and Parrott. *Hunt:* Studies in Literature and Style; Principles of Discourse.

5. English Literature, historical and critical survey from Chaucer to Pope, lectures on representative authors. Junior Elective; first term [2]. Professor Hunt. *Hunt:* English Prose and Prose Writers. *Sweet:* Extracts from Chaucer. *Kitchin:* Spenser's Faerie Queene. *Macmillan:* Milton's Paradise Lost, Book I. *Hodgkins:* Milton's Lyrics.

6. English Literature. Writers from Pope to Cowper. Rise of the Romantic School. Junior Elective; second term [2]. The Dean.

7. Old English. Junior and Senior Elective; first term [2]. Professor Hunt. *Sweet:* Anglo-Saxon Reader. *Bright:* Anglo-Saxon Reader.

8. General English Philology. Lectures on the History and Structure of the English Language. Junior and Senior Elective; second term [2]. Professor Hunt. Readings in Chaucer. *Champney:* History of English. *Morris and Skeat:* Specimens of Early English. *Corson:* Chaucer's Canterbury Tales. *Skeat:* Piers Plowman. This course consists of lectures and English Language readings.

9. English Literature. Poets from Cowper to Browning. Prose writers, Scott, Carlyle, Thackeray, De Quincey, Charlotte Bronte, and George Eliot. Senior Elective; first term [2]. The Dean.

10. English Literature. The Elizabethan Drama. Marlowe, Ben Jonson, Shakespere, Webster. Senior Elective; second term [2]. The Dean.

12. American Literature. Discussion of leading types and authors. Senior Elective; second term [2]. Professor Hunt. *Richardson:* American Literature. *Stedman:* Poets of America.

13. Advanced Old English and Gothic. Graduate course; first term [2]. Professor Hunt. *Harrison and Sharp:* Beowulf. *Hunt:* Caedmon (Exodus and Daniel). *Heyne:* Ulfilas. *Skeat:* Gospel of St. Mark in Gothic. *Braune:* Gothic Grammar. Open to those who have taken 7 and 8.

14. Literary Criticism and Discussion. Graduate course; second term [1]. Professor Hunt. Lectures on Literature: Its nature, laws, methods and relations.

15, 16. Advanced Old English and Gothic. Graduate course. Professor Hunt.

17. The Periodical Literature of the Eighteenth Century. Graduate course; first term [2]. The Dean.

19. Influence of the French Revolution upon English Poetry. Graduate course; first term [1]. Professor Perry.

20. History of English Literary Criticism. Graduate course; second term [1]. Professor Perry.

XI. Oratory and Æsthetic Criticism.

PROFESSOR PERRY AND MR. COVINGTON.

1, 2. Elocution; combined with Rhetoric. Drill in gesture and vocal emphasis. Exercises in description and narration. Freshman Required; both terms [1]. Professor Perry and Mr. Covington. *Raymond and Miller:* The Speaker. *Raymond and Wheeler:* The Writer. *Baldwin:* Specimens of Description. *Brewster:* Specimens of Narration.

4. Argumentative Composition. Sophomore Required; second term [1]. Mr. Covington. *Covington:* The Debater.

6. Oratorical Composition and Delivery. Junior Optional; second term. [Exercises at specified hours.] Professor Perry.

7. Oratorical Composition and Delivery. Senior Optional; first term. [Exercises at specified hours.] Professor Perry.

There are public contests for various prizes in oratory, poetry and disputation. (See heading "Prizes and Competitive Scholarships.")

9. Poetics. Lyric, narrative and dramatic poetry will be studied as forms of expression. Senior Elective; first term [2]. Professor Perry.

10. Prose Fiction. A study of prose fiction as a form of literary art. Senior Elective; second term [2]. Professor Perry.

XII. Exercises in English Composition.

In addition to the exercises in narration and description, disputation and oratory, prepared in connection with the courses indicated under X and XI, extended essays and other forms of composition are required in the Freshman, Sophomore and Junior years, and in many of the elective courses open to Seniors. They are prepared under the supervision of the professors of English literature, discourse and oratory, and are carefully examined and corrected. In every year of the course several prizes or honorary appointments are given for excellence in essay writing and in public address, either by the College, or by the Cliosophic or American Whig Societies, acting through committees appointed from their own members in the Faculty.

XIII. German.

PROFESSOR HUMPHREYS AND DR. HOSKINS.

1, 2. Elements of Grammar. Exercises in composition. Reading. Freshman Elective (Required for those not taking German 3, 4; 5, 6; or French). Both terms [2]. Dr. Hoskins. *Whitney:* Brief German Grammar. *Whitney:* Introductory German Reader.

3, 4. Intermediate Course in grammar, composition, and reading. Freshman Elective (open to those who have passed the elementary examination for admission: required for those not taking German 1, 2; 5, 6; or French). Both terms [2]. Professor Humphreys or Dr. Hoskins. *Whitney:* Compendious German Grammar. *Whitney:* Introductory German Reader. *Bronson:* German Prose and Poetry. *Leander:* Träumereien.

5, 6. Advanced Course in grammar, syntax, composition, and reading. Freshman Elective (open to those who have passed the

advanced examination for admission: required for those not taking German 1, 2; 3, 4; or French). Both terms [2]. Dr. Hoskins. *Whitney:* Compendious German Grammar. *Harris:* German Composition. *Storm:* Immensee. *Heyse:* Die Blinden. *Freytag:* Die Journalisten.

7, 8. Modern German Prose and Poetry. Composition and syntax. Sophomore Elective (open to those who have passed German 1, 2 or 3, 4). Both terms [2]. Professor Humphreys. *Whitney:* Compendious German Grammar. *Harris:* German Composition. *Riehl:* Burg Neideck, Der stumme Ratsherr. *Auerbach:* Auf Wache. *Schiller:* Wilhelm Tell, Lyric Poems.

9, 10. Schiller's Life and Works. Composition. Sophomore Elective (open to those who have passed German 5, 6). Both terms [2]. Professor Humphreys. *Schiller:* Ausgewählte Werke. *v. Jagemann:* Materials for Composition.

11, 12. Lessing's Life and Works. Junior Elective; both terms [2]. Dr. Hoskins. *Lessing:* Ausgewählte Werke.

13, 14. Goethe's Life and Works. Senior Elective; both terms [2]. Professor Humphreys. *Goethe:* Ausgewählte Werke.

15, 16. Middle High German. Grammar, lectures and reading. Restricted Senior Elective and Graduate Course, open only to those proficient in modern German; both terms [2]. Professor Humphreys or Dr. Hoskins. *Paul:* Mittelhochdeutsche Grammatik. *Bartsch:* Das Nibelungenlied, Walther von der Vogelweide.

17, 18. Old High German. Grammar, reading, studies in word-forms. Requires a knowledge of modern German; knowledge of Gothic useful. Restricted Senior Elective and Graduate Course; both terms [2]. Dr. Hoskins. *Braune:* Althochdeutsche Grammatik, and Althochdeutsches Lesebuch.

19 I, 20 I. Old Icelandic. Grammar, lectures and reading. Graduate course; both terms [2]. Given 1896-97, alternating with 19 II. Dr. Hoskins. *Noreen:* Altisländische und altnorwegische Grammatik (2 Ed.) *Brenner:* Altnordisches Handbuch. *Ranisch:* Die Volsungasaga.

19 II. Old Saxon. Grammar and reading. Graduate Course; first term [2]. Given 1897-98, alternating with 19 I. Dr. Hoskins. *Gallée:* Altsächsische Grammatik. *Behaghel:* Heliand.

For courses in Gothic and Anglo-Saxon see announcement of the English Department.

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...Harper. *Molière:*

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...alternating
...Professor
...Fantasio

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D'Orléans, Villon. Graduate course; second term [2]. Professor Harper.

9, 10. French Literature of the Renaissance. Lectures, themes and collateral reading. *Comparetti, Marot, Ronsard, Rabelais, Montaigne, Amyot.* Graduate course; both terms [2]. Prof. Harper.

11, 12. Old French Readings. Second Elective; both terms [2]. Professor Lewis. This course is intended to give the student a good reading knowledge of Old French as well as to familiarize him with the literature of the period. *Gaston Paris*, Extraits de la Chanson de Roland is first read, then *Suchier*, Aucassin et Nicolete, *Warnke*: Die Lais de Marie de France, *Ebeling*, Karls Reise, and *Foerster*: Cligès.

13. Old Provençal grammar and introduction to mediæval literature of the langue d'oc. Second Elective and Graduate course; first term [2]. Mr. Vreeland. Lectures on the history of Provence in its connections with literary development. Reading of selections from the Troubadours.

14. Old Provençal Readings. Second Elective and Graduate course; second term [2]. Mr. Vreeland. A continuation of the first term's work, with lectures on the lives and writings of the Troubadours.

15, 16. Old French Philology. Graduate course; both terms [2]. Professor Lewis. The lectures on Old French etymology and morphology, given in this course, bear mainly on the subject-matter contained in *Schwan*: Grammatik des Altfranzösischen, and *Suchier*: Le français et le provençal.

17. *Physiological* Phonetics. Graduate course; first term [2]. Professor Lewis. This course consists entirely of lectures, at first on general physiological phonetics, and later on French phonetics: the required books are: *Sweet*: A Primer of Phonetics, *Beyer*: Französische Phonetik, and *Passy*: Le français parlé.

18. French Dialects. Graduate course; second term [2]. Professor Lewis. Lectures are given on the Franco-Norman and the Anglo-Norman dialects, and deal first with old Norman texts, and, later, with the modern patois of Normandy and the Channel Islands.

19, 20. Old French Text Criticism. Graduate course; both terms [2]. Professor Lewis. The object of this course is to teach [illegible] Old French text from the manuscript.

XIV. French.

PROFESSORS HARPER AND LEWIS, AND MR. VREELAND.

1a, 2a. Elementary French. Freshman Elective (Required for those not taking French 1b, 2b or German 1, 2); both terms [2]. Professor Harper, or Mr. Vreeland.

1b, 2b. French. Freshman Elective (substitute for French 1a, 2a, open to those who have passed the advanced entrance requirement in French); both terms [2]. Professor Harper, or Mr. Vreeland.

3. Advanced French. Sophomore Elective; first term [2]. Professor Harper, or Mr. Vreeland. *Balzac:* Harper and Livingood's Selections. *Dumas:* Les Trois Mousquetaires; outside reading and composition.

4. Advanced French. Sophomore Elective; second term [2]. Professor Harper, or Mr. Vreeland. *La Fontaine:* Fables. *Daudet:* Lettres de Mon Moulin.

5 I. French Literature. Lectures on medieval and renaissance periods and 17th century drama. Course for 1897–98, alternating with 5 II. Junior and Senior Elective; first term [2]. Professor Harper. *Voltaire:* Siècle de Louis XIV. *Corneille:* Cid.

6 I. French Literature. Lectures on principal authors of 17th century. Course for 1897–98, alternating with 6 II. Junior and Senior Elective; second term [2]. Professor Harper. *Molière:* Le Misanthrope. *Duc de St. Simon:* Mémoires.

5 II. French Literature. Lectures on principal authors of the 18th century. Collateral reading. Course for 1896–97, alternating with 5 I. Junior and Senior Elective; first term [2]. Professor Harper. *Beaumarchais:* Le Barbier de Séville. *Musset:* Fantasio and On ne badine pas avec l'Amour. *Hugo:* Hernani.

6 II. French Literature. Lectures on 19th century authors. Collateral reading. Course for 1896-97, alternating with 6 I. Junior and Senior Elective; second term [2]. Professor Harper. *Augier:* Comedies. *Balzac:* Eugénie Grandet.

7. Medieval French Literature. Lectures, themes and collateral reading. The chronicles of *Villehardouin*, *Joinville*, and *Froissart*. Graduate course; first term [2]. Professor Harper.

8. Medieval French Literature. Lectures, themes and collateral reading. The development of lyric poetry. *Charles*

D'Orléans, Villon. Graduate course; second term [2]. Professor Harper.

9, 10. French Literature of the Renaissance. Lectures, themes and collateral reading. *Commines, Marot, Rabelais, Ronsard, Montaigne, Amyot.* Graduate course; both terms [2]. Prof. Harper.

11, 12. Old French Readings. Senior Elective; both terms [2]. Professor Lewis. This course is intended to give the student a good reading knowledge of Old French, as well as to acquaint him with the literature of the period. *Gaston Paris:* Extraits de la Chanson de Roland is first read, then *Suchier:* Aucassin et Nicolete, *Warnke:* Die Lais de Marie de France, *Koschwitz:* Karls Reise, and *Foerster:* Cligès.

13. Old Provençal grammar and introduction to medieval literature of the langue d'oc. Senior Elective and Graduate course; first term [2]. Mr. Vreeland. Lectures on the history of Provence in its connections with literary development. Reading of selections from the Troubadours.

14. Old Provençal Readings. Senior Elective and Graduate course; second term [2]. Mr. Vreeland. A continuation of the first term's work, with lectures on the lives and writings of the Troubadours.

15, 16. Old French Philology. Graduate course; both terms [2]. Professor Lewis. The lectures on Old French etymology and morphology, given in this course, bear mainly on the subject-matter contained in *Schwan:* Grammatik des Altfranzösischen, and *Suchier:* Le français et le provençal.

17. Physiological Phonetics. Graduate course; first term [2]. Professor Lewis. This course consists entirely of lectures, at first on general physiological phonetics, and later on French phonetics; the required books are: *Sweet:* A Primer of Phonetics, *Beyer:* Französische Phonetik, and *Passy:* Le français parlé.

18. French Dialects. Graduate course; second term [2]. Professor Lewis. Lectures are given on the Franco-Norman and the Anglo-Norman dialects, and deal first with old Norman texts, and, later, with the modern patois of Normandy and the Channel Islands.

19, 20. Old French Text Criticism. Graduate course; both terms [2]. Professor Lewis. The object of this course is to teach the student how to edit an old French text from the manuscript.

XV. Italian.

PROFESSOR HARPER.

1. Elementary Italian. Junior and Senior Elective; first term [2]. *Grandgent:* Grammar. Modern short stories.

2. Dante: Inferno. Junior and Senior Elective; second term [2].

3. Dante: Purgatorio. Senior Elective; first term [2].

4. Dante: Paradiso. Senior Elective; second term [2].

5, 6. Dante and his age. Lectures, themes and collateral reading on Dante's predecessors and contemporaries, and his Italian works other than the Divina Commedia. Graduate course; both terms [2]. Professor Harper.

XVI. Spanish.

PROFESSOR LEWIS.

1, 2. Modern Spanish. Junior and Senior Elective; both terms [2]. Professor Lewis. First, *Edgren:* Spanish Grammar, and then *Partier á tiempo*, *Tu amor ó la muerte*, *Un desafio* and *El Indiano* are read; these plays are followed by *Caballero:* La Familia de Alvareda.

XVII. Biblical Literature.

THE PRESIDENT, PROFESSORS HIBBEN AND PATTON AND MR. MARTIN.

1, 2. Introduction to the New Testament. Freshman Required; both terms [1]. Professor Patton.

3. The Pauline Epistles. Sophomore Required; first term [1]. The President.

4. The Gospel of John. Sophomore Required; second term [1]. Professor Patton.

5 I. History of the Jews. Junior and Senior Elective; first term [2]. Given 1896–97, alternating with 5 II. Professor Hibben.

6 I. Prophetic Books of the Old Testament. Junior and Senior Elective; second term [2]. Given 1896–97, alternating with 6 II. Professor Hibben.

5 II. Poetical Books of the Old Testament. Junior and Senior Elective; first term [2]. Given 1897–98, alternating with 5 I. Professor Hibben.

6 II. Ethical Teachings of the New Testament. Junior and Senior Elective; second term [2]. Given 1897–98, alternating with 6 I. Professor Hibben.

7, 8. Hebrew. Elementary course. Grammar and exercises, and reading easy portions of Old Testament. Senior Elective, open to graduates; both terms [4]. Mr. Martin. *Green:* Elementary Hebrew Grammar.

DEPARTMENT OF MATHEMATICS AND NATURAL SCIENCE.

XVIII. Mathematics.

PROFESSORS DUFFIELD, FINE, AND THOMPSON, MR. HINTON AND MR. WILSON.

1a. Solid and Spherical Geometry and Mensuration. Freshman Required; first term [3]. Professor Thompson, Mr. Hinton, or Mr. Wilson.

2a. Trigonometry. Freshman Required; second term [2]. Professor Thompson, Mr. Hinton, or Mr. Wilson. *Wells:* Plane and Spherical Trigonometry.

3. Selected portions of Algebra. Freshman Required; first term [1]. Professor Thompson or Mr. Hinton. *Wells:* College Algebra.

4. Elementary Theory of Equations. Freshman Required; second term [2]. Professor Fine, Mr. Hinton, or Mr. Wilson. *Wells:* College Algebra.

1b, 2b. Trigonometry and Theory of Equations, advanced course. Open only to those who have passed the maximum mathematics for entrance. Freshman Elective (substitute for 1a or 2a); both terms [3]. Professor Thompson.

5. Conic Sections, treated from the Cartesian standpoint. Sophomore Required; first term [3]. Professor Fine, Mr. Hinton, or Mr. Wilson. *C. Smith:* Conic Sections (Chapters I–IX).

7, 8. Differential and Integral Calculus. Sophomore Elective; both terms [2]. Professor Fine. *Osborne:* Differential and Integral Calculus.

9, 10. Calculus and Elementary Differential Equations. Junior and Senior Elective; both terms [2]. Professor Fine. Lectures. *W. Johnson:* Differential Equations.

11. Analytic Geometry of Three Dimensions; the plane, straight line, and quadric surface. Junior and Senior Elective; first term [2], alternating with 15. Given 1897–98. Professor Thompson. *C. Smith:* Solid Geometry.

12. Analytic Geometry of Three Dimensions; theory of surfaces and curves. Junior and Senior Elective; second term [2], alternating with 16. Given 1897–98. Professor Thompson. Lectures. *C. Smith:* Solid Geometry.

14. (Physics 6). Analytical Mechanics. Junior and Senior Elective; second term [2]. Professor Magie.

15, 16. Higher Plane Curves. Junior and Senior Elective; both terms [2], alternating with 11, 12. Given 1896–97. Professor Thompson. *Durège:* Die ebenen curven dritter Ordnung.

17. Theory of Functions, elementary course. Senior Elective and Graduate course; first term [2]. Professor Fine. *Durège.*

18. Elliptic Functions. Senior Elective and Graduate course; second term [2]. Professor Fine.

19, 20. Differential Equations, general course, embracing Lie's transformation theory. Graduate course; both terms [2]. Mr. Brooks. (Given on application.)

21, 22. Theory of Numbers and Higher Algebra, including theory of substitutions and the arithmetical theory of the algebraic equation. Graduate course; both terms [2]. Professor Fine. Lectures. *Dirichlet-Dedekind:* Zahlentheorie. (Given on application.)

23. Solid Geometry. Graduate course; first term [2]. Professor Thompson. *Frost:* Solid Geometry.

24. Higher Metrical Geometry. Graduate course; second term [2]. Professor Thompson. Selected portions of *Picard* or *Darboux.*

25. Linear Differential Equations. Graduate course; first term [2]. Professor Fine. *Heffter.*

26. Partial Differential Equations. Graduate course; second term [2]. Professor Fine. *Goursat.*

XIX. Astronomy.

PROFESSORS YOUNG AND REED.

1. Elementary Astronomy. Lectures, recitations from text book. Junior Elective; first term [2]. Professor Young. *Young:* Elements of Astronomy.

3. General Astronomy. Extended course—Astronomical instruments and methods; the determination of the principal astronomical constants; eclipses; undisturbed planetary motion; spectroscopic astronomy. Lectures and recitations. Senior Elective; first term [2]. Professor Young. *Young:* General Astronomy.

5, 6. Practical Astronomy. Determination of time, latitude, azimuth, and the positions of planets or comets. Spectroscopic observation of the sun. Recitations and observatory work. Senior Elective; both terms [2]. Professor Reed. *Campbell:* Practical Astronomy. *Chauvenet:* Practical Astronomy.

7, 8. Theoretical Astronomy and the calculation of orbits. Graduate course; both terms [1]. Professors Young and Reed. *Watson:* Theoretical Astronomy. *Oppolzer:* Bahn-bestimmung. *Klinkerfues:* Theoretische Astronomie.

9, 10. Practical Astronomy. The same as courses 5, 6, but with additions. Recitations and observatory work. Open to graduates who did not take it in Senior year; both terms [2]. Professor Reed. *Campbell:* Practical Astronomy. *Chauvenet:* Practical Astronomy.

XX. Physics.

PROFESSORS BRACKETT AND MAGIE, DR. WATERMAN AND DR. LOOMIS.

2. Elementary Mechanics; mechanics of masses and molecular mechanics. Sophomore Required; second term [2]. Professor Magie and Dr. Loomis. *Anthony and Brackett:* Elementary Text-Book of Physics, Revision, 1896.

3. General Physics; molecular mechanics, sound, heat, electricity, light. Recitations and experimental lectures. Junior Required; first term [3]. Professor Magie. *Anthony and Brackett:* Elementary Text-Book of Physics, Revision, 1896.

4 1. Theory of Heat, with lectures on thermodynamics and on van der Waal's theory of a gas. Given 1897–98, alternating with

4 II. Junior and Senior Elective; second term [2]. Professor Magie. *Maxwell:* Theory of Heat.

4 II. Theory of Light, with experimental demonstrations. Given 1896–97, alternating with 4 I. Junior and Senior Elective; second term [2]. Professor Magie. *Preston:* Theory of Light.

6. Analytical Mechanics. (Math. 14.) The elements of the subject, open to those who have taken Mathematics 7, 8. Junior and Senior Elective; second term [2]. Professor Magie. *Ziwet:* Theoretical Mechanics.

8. Chemical Physics. The study of the modern theories of solutions. Junior and Senior Elective; second term [2]. Dr. Loomis.

9. Practical Physics; experimental work in mechanics and heat, with collateral lectures and recitations. Senior Elective; first term [2]. Dr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. I.

10. Practical Physics, experimental work in electricity, with lectures on the theory of electrical measurements. Senior Elective; second term [2]. Dr. Waterman. *Stewart and Gee:* Elementary Practical Physics, Vol. II.

11. Theory of Electricity; open to those who have taken Mathematics 7, 8. Senior Elective; first term [2]. Professor Magie. *J. J. Thomson:* Elements of Electricity and Magnetism.

13. Laboratory Practice; advanced measurements in heat and light, with lectures on research methods and collateral reading of original memoirs. Graduate course; first term. Dr. Waterman.

14. Laboratory Practice; advanced measurements in electricity and magnetism, with lectures on research methods and collateral reading of original memoirs. Graduate course; second term. Dr. Waterman.

Courses 13, 14 are supplemented by a journal meeting held at stated intervals, as a part of the courses.

15, 16. Mathematical Physics; heat, light, electricity and magnetism. Graduate course, (given on application); both terms [2]. Professor Magie.

17, 18. Special Investigations. Graduate course; both terms. Professor Magie, Dr Waterman and Dr. Loomis.

(The physical laboratory is open throughout the week to graduate students.)

XXI. Chemistry.

PROFESSORS CORNWALL AND MCCAY, MR. NEHER AND MR. SILL.

2. General Chemistry: experimental lectures and written recitations. Sophomore Required; second term [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

3. General Chemistry. Organic and theoretical chemistry. Junior Elective; first term [2]. Professor McCay. *Remsen:* Organic Chemistry. *Remsen:* Theoretical Chemistry.

5. Laboratory Chemistry: lectures, recitations and laboratory work; on qualitative analysis of simple salts; experimental chemistry; sugar, milk, drinking water, poisons, and the more important organic compounds. Senior Elective; first term [2]. Professor Cornwall and Mr. Sill.

XXII. Physical Geography.

PROFESSOR LIBBEY.

2. Physical Geography. Physical geography proper; morphology of the continents, oceanography, climatology. Senior Elective; second term [2]. Professor Libbey. *Guyot:* Physical Geography.

4. Physical Geography. The relations of physical geography to the history of mankind. Graduate course (open to those who have taken geology and physical geography); second term [1]. Professor Libbey.

XXIII. Geology.

PROFESSOR SCOTT.

2. Geology, elementary course; general outline of the subject, including dynamical, structural and historical geology. Junior Elective, except for those who elect 3, 4; second term [2]. Professor Scott. *Scott:* Introduction to Geology.

3 1, 4 1. Physical Geology. Advanced course in dynamical and structural geology, with provision for laboratory and field work. Given 1897–98 (alternating with 3 11, 4 11). Junior and Senior

Elective; both terms [2]. Professor Scott. *Green:* Geology for Students. *Dana:* Manual of Geology, new ed. This course is open only to those who have taken Biology 15.

3 II, 4 II. Historical Geology. Advanced course; the detailed study of the formations, their stratigraphy, palæontology, distribution and economic products. Given 1896–97, (alternating with 3 I, 4 I). Junior and Senior Elective; both terms [2]. Professor Scott. *Dana:* Manual of Geology. *Kayser:* Text Book of Comparative Geology.

XXIV. Biology.

PROFESSORS MACLOSKIE, SCOTT, LIBBEY, RANKIN AND MCCLURE AND MR. DAHLGREN.

1. Elements of Zoology and Botany. Lectures on general botany, with practical work in the examination of plants, followed by lessons in zoology. Sophomore Required; first term [2]. Professor Macloskie. *Macloskie:* Elementary Botany. *Packard:* Elementary Zoology.

3. General Biology. Lectures on the principles of biological science, with laboratory work. Junior Elective; first term [2]. Professor Rankin. *Boyer:* Elementary Biology.

4. Practical Botany. Laboratory work in vegetable anatomy, histology, and medical botany. Junior Elective; second term [2]. Professors Macloskie and Rankin. *Bower:* Practical Botany. *Spalding:* Introduction to Botany.

6. Vertebrate Anatomy. Lectures and dissections of vertebrates. Junior Elective; second term [2]. Professor McClure. *Marshall and Hurst:* Practical Zoology. *Wiedersheim:* Comparative Anatomy of Vertebrates. *Huxley:* Comparative Anatomy of Vertebrates.

8. Invertebrate Morphology. Junior Elective; second term [2]. Professor Rankin.

10. Normal Histology. Lectures, demonstrations and laboratory practice in microscopical anatomy. Junior and Senior Elective; second term [2]. Professor Libbey and Mr. Dahlgren. *Schaefer* and *Prudden.*

11. Comparative Osteology. Lectures and study of skeletons in the museum. Only for students contemplating the medical pro-

fession. Senior Elective; first term [2]. Professor Macloskie. *Flower:* Osteology of the Mammalia. *Parker and Bettany:* Morphology of the Skull.

12. Practical Histology. Practical work in hardening, injection, section cutting, etc., involved in histology. Senior Elective (open only to those who have taken 10 in the Junior year); second term [2]. Professor Libbey and Mr. Dahlgren. *Whitman.*

13. Physiology. Lectures on methods and results, including the functions of the body in health and disease. Senior Elective; first term [2]. Professor Macloskie. *Martin:* Human Body. *Foster:* Physiology.

14. Embryology, practical work and lectures. Senior Elective; second term [2]. Professor McClure and Mr. Dahlgren. *Foster and Balfour:* Elements of Embryology. *Hertwig:* Embryology. *Minot:* Human Embryology.

15. Mammalian Anatomy. Senior Elective; first term [2]. Professor McClure and Mr. Dahlgren.

16. Palæontology; morphology of the extinct vertebrates and phylogeny of existing forms. Senior Elective; second term [4]. Professor Scott. *Huxley:* Anatomy of Vertebrates.

Students entering for *Special Honors in Biology* must have attained a rank equivalent to second group in 1, or qualify themselves by a special examination for this rank, and pursue 3–14 inclusive under the usual regulations of Special Honor work. In place of the separate theses in the Senior courses, the student may select a thesis from one of the courses, which must show a higher standard of work. To fill the six hours elective work Seniors must elect Chemistry 5, or Physics 9.

In course 6 a fee of $4.50 is charged for the use of laboratory instruments, reagents and material, subject to a drawback.

In courses 10 and 12 a fee of $10 is charged to cover mounting material, slides, etc., as each student retains the set of specimens prepared as his own.

Students who contemplate entering the medical profession may combine the Electives in Biology and Chemistry, so as to receive when graduating a special certificate recommending them to medical colleges which have a four years' course.

EXHIBIT OF STUDIES FOR 1896–97.

NOTE.—The numbers indicate hours per week.
Each elective course takes two hours weekly, except in special cases.

FRESHMAN YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin	4	Latin	4
Greek	4	Greek	4
Mathematics	4	Mathematics	4
Bible	1	Bible	1
English	1		
	14 hours.		13 hours.

ELECTIVE.

(Student to take one Elective—2 hours.)

German	2	German	2
French	2	French	2
	16 hours.		15 hours

SOPHOMORE YEAR.

REQUIRED.

First Term.		*Second Term.*	
Latin	2	Latin	2
Greek	2	Greek	2
Mathematics	3	English	2
History	2	Chemistry	2
Zool. and Bot.	2	Mechanics	2
Bible	1	Bible	1
	12 hours.		11 hours.

ELECTIVE.

(Student to take two Electives—4 hours.)

Latin	2	Latin	2
Greek	2	Greek	2
Mathematics	2	Mathematics	2
French	2	French	2
German	2	German	2
	16 hours.		15 hours.

JUNIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Physics	3	Logic	3
Psychology	2	Political Economy	3
	5 hours.		6 hours.
Five Electives	10 hours.	Four Electives	8 hours.
	15 hours.		14 hours.

JUNIOR ELECTIVE COURSES.

The Elective Courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Juniors only.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy*
	Plato (*Greek* 10)
	Exper. Psych.
HISTORY, JURISPRUDENCE AND POLITICS.	
History 5	History
History 7	*American Const. Law*
Public Law	
ARCHÆOLOGY AND ART.	
Art 1	*Art* 2
CLASSICS.	
Aristophanes 9	*Plato* 10
Juvenal 9	Seneca 10
	Plautus 12

ENGLISH.

English Lit. 5	English Lit. 6
Old English 7	*English Philology* 8

MODERN LANGUAGES.

German 11	German 12
French 5	*French* 6
Italian 1	*Italian* 2
Spanish 1	*Spanish* 2

BIBLE.

Bible 5	*Bible* 6

MATHEMATICS.

Diff. Equations 9	*Diff. Equations* 10
Geometry 11	*Geometry* 12
	Anal. Mech.

PHYSICAL SCIENCE.

Astronomy 1	*Anal. Mech.*
Theor. Chemistry 8	*Physics* 4

NATURAL SCIENCE.

Biology 8	Practical Botany 4
Geology 8	*Geology* 4
	Geology 2
	Histology 10
	Vert. Anatomy 6
	Invertebrate Morphology 8

JUNIOR ELECTIVE EXCLUSIONS.

In the list of Junior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
{ *Public Law*	{ *Am. Const. Law*
{ *Art* 1	{ *Art* 2
{ Astronomy 1	{ Geology 2
{ *Spanish* 1	{ *Spanish* 2
Geometry	{ *Geometry*
	{ *Eng. Philology*
	{ Vert. Anat. 6

English Lit. 5	English Lit. 6 Invert. Morph.
Hist. of Phil.	*Hist. of Phil.*
Ancient History *Bible* 5	History *Bible* 6
Theoretical Chemistry 8 *Juvenal* 9 Old English	Seneca 10 Pract. Bot. 4
Aristophanes 9	Exp. Psychology
Biology 8 *Diff. Equations*	*Plato* 10 *Diff. Equations*
German	German
Geology 8	*Geology* 4 *Anal. Mech.* Plautus 12
Italian 1	*Italian* 2 *Physics* 4 *Histology* 10
French Lit.	French Lit.

SENIOR YEAR.

REQUIRED.

First Term.		*Second Term.*	
Ethics	2 hours.	Ev. of Christianity	1 hour.
Six Electives	12		12 hours.
	14 hours.		13 hours.

ELECTIVE COURSES.

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Seniors only.

SENIOR ELECTIVE COURSES.

First Term.	*Second Term.*
PHILOSOPHY.	
History of Philosophy	*History of Philosophy*
Logic 9	Logic 10
Physiological Psychology	Science and Religion
Aristotle	*Plato*
Theism	Theism
Metaphysics	Outlines of Philosophy

Experimental Psychology	Experimental Psychology
Adv. General Psychology	Adv. General Psychology
Lucretius 13	Cicero 14
Mod. Phil., restricted.	Mod. Phil., restricted.

HISTORY, JURISPRUDENCE AND POLITICS.

History	History
Jurisprudence 1	*Jurisprudence* 2
Jurisprudence 3	Jurisprudence 4
Roman Law	Roman Law
Finance	History of Pol. Econ.
Hist. of Pol. Theories 11	

ARCHÆOLOGY AND ART.

Art 1	*Art* 2
Art 3	Art 4
Art 5	Art 6

CLASSICS (WITH SANSKRIT).

Sanskrit 1	Sanskrit 2
Greek 9	*Greek* 10
Greek 11	Greek 12
Greek 13	Greek 14
Latin 9	
Latin 13	Latin 14
Latin 15	Latin 16
Roman Law	Roman Law

ENGLISH.

English Literature 9	English Literature 10
Old English 7	*English Philology* 8
Gothic 13	
Poetics	Prose Fiction
	American Literature

MODERN LANGUAGES.

German 13	German 14
German 15	German 16
French Literature	*French Literature*
Old French	Old French
Italian 1	*Italian* 2

Italian 3	Italian 4
Spanish 1	*Spanish* 2

BIBLE.

Bible 5	*Bible* 6
Hebrew 7	Hebrew 8

MATHEMATICS.

Diff. Equations 9	*Diff. Equations* 10
Geometry 11	*Geometry* 12
Theory of Functions 17	Theory of Functions 18
	Analytical Mechanics

PHYSICAL SCIENCE.

Astronomy 8	*Analytical Mechanics*
Practical Astronomy	Practical Astronomy
Physics 9	*Physics* 4
Practical Physics	Practical Physics

NATURAL SCIENCE.

Laboratory Chemistry	Physical Geography
Geology 8	*Geology* 4
Physiology	Embryology
Compar. Osteology	*Histology* 10
Mammalian Anatomy	Practical Histology 12
	Palæontology

Senior Elective Exclusions.

In the list of Senior Electives given below, the courses which are bracketed are mutually exclusive, and consequently only one course in any bracketed group may be elected.

First Term.	*Second Term.*
Gothic	Embryology
Comp. Pol. 9	Latin 16
Higher Plane Curves	Higher Plane Curves
Osteology	Palæontology
Roman Law	
Latin 15	American Lit.
Ad. Gen. Psych. 21	Phys. Geog.

Public Law
Art 1

Am. Const. Law
Art 2
Old French

Theism
Practical Physics
Spanish 1
Sanskrit

Theism
Practical Physics
Spanish 2

Old French
Greek 11
Geometry
Mammalian Anatomy
Hebrew
Lucretius 18

Eng. Philology
Greek 12
Geometry
Histology 12

Art 8
Astronomy 8
History of Law

Cicero 14
Art 6
English Com. Law

Physiology
Aristotle

Hebrew
Sanskrit
Outlines of Philosophy
History of Philosophy

History of Philosophy
Lab. Chemistry
German 13
Bible 5

German 14
Bible 6
Palæontology

Exp. Psychology 19
History
Theory of Functions
Juvenal
Old English

Exp. Psychology 20
History
Theory of Functions

Finance
German 15
Physiology
Differential Equations
Hebrew

History of Pol. Econ.
German 16
Plato
Differential Equations

Art 5
Logic 9
Italian 8
Aristophanes

Art 4
Logic 10
Science and Religion

German 17
Metaphysics
Geology 8

Physiological Psychology
Italian 1
Eng. Lit. 9
Physics 9

French Literature
Aristotle

Practical Astronomy
Poetics

Sociology
Italian 4
Hebrew
Anal. Mechanics
Geology 4

Histology 10
Physics 4
Italian 2
English Literature 10

Palæontology
Greek 14
Adv. Gen. Psych. 22

French Literature

Roman Law
Practical Astronomy
Prose Fiction

REGULATIONS FOR GENERAL AND SPECIAL HONORS.

Honors are of two kinds, General and Special, and in each kind there are two degrees of distinction, High Honors and Honors. In very exceptional cases the Faculty may also bestow the further distinction of Highest Honors, either General or Special.

I. General Honors are awarded for general excellence in studies at the close of each academic year, according to the following provisions:—At the close of the Freshman, Sophomore and Junior years, High General Honors are given to those whose average rank for the year is within the First General Group, and General Honors to those whose average rank for the year is within the Second General Group. At graduation, High General Honors are given to those whose final average rank for the whole academic course is within the First General Group, and similarly General Honors to those within the Second General Group.

II. Special Honors are awarded for excellence in single leading departments of study at the close of the Sophomore year and at graduation, according to the following provisions: The Second-Year Special Honors at the close of the Sophomore year, are given in the following departments: Latin, Greek, Mathematics. Only those whose average rank for the year in all their Sophomore courses is not below the Third General Group, are eligible for Second-Year Special Honors. Such of these as maintain a first group rank in the Freshman and Sophomore courses belonging to the department in which Special Honors are sought, receive High Honors, and similarly those who maintain a second group rank receive Honors.

The Final Special Honors are awarded at graduation in the following departments: 1. Philosophy; 2. History, Jurisprudence and Politics; 3. Archæology and Art; 4. Classics; 5. Modern Languages; 6. English; 7. Mathematics; 8. Physical Science; 9. Natural Science. Only those whose final average rank for the

whole academic course is not below the Third General Group are eligible for Final Special Honors. Such of these as maintain a first group standing in at least nine of any ten courses in one of the above departments, pursuing four of these courses in Junior year, and six in Senior year, receive High Honors, and the others who maintain an average first group rank in their ten courses receive Honors.

In departments where less than ten Junior and Senior courses are available for Special Honors, the necessary number of additional courses must be taken from a cognate department.

Students who intend to study for Special Honors shall give written notice of their intention to the Registrar, when they hand in their lists of electives at the beginning of Sophomore or Senior year.

ACADEMIC FRESHMAN FIRST TERM SCHEDULE.—1896–97.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8		II, V Bible I French [4 IV German [3	III, VI Bible II French [4 IV German [3	I, IV Bible III French [4 VI German [3	I Latin γ [13 III Latin δ [14 V Greek ε [8	I Latin γ [13 III Greek δ [2 V Greek ε [8
9	III Math 1 δ [10½ V Math 8 γ [9½	III French [4 VI German [3	I French [4 V German [3	II French [4 V German [3	II Latin γ [13 IV Latin δ [14 VI Greek ε [8	II Latin γ [13 IV Greek δ [2 VI Greek ε [8
10	IV Math 1 δ [10½ VI Math 8 γ [9½	III Math 8 γ [9½ IV Math 1 δ [10½ VI Math 1 β [10	I Greek δ [2 III Latin ε [14 V Greek ε [8	I Latin ε [14 III Greek ε [8 V Latin γ [13	I Greek δ [2 III Latin δ [14 V Latin γ [13	I Latin γ [13 III Latin δ [14 V Greek δ [2
11	I Math 8 γ [9½ II Math 1 δ [10½ VII Math 1b β [10	I Math 1 β [10 II Math 1 δ [10½ V Math 1 γ [9½	II Greek δ [2 IV Latin ε [14 VI Greek ε [8	II Latin ε [14 IV Greek ε [8 VI Latin γ [13	II Greek δ [2 IV Latin δ [14 VI Latin γ [13	II Latin γ [13 IV Latin δ [14 VI Greek δ [2
8	VII Math 1b β [10	VII Math 1b β [10		II English	I English	
4	I Math 1 β [10 III Math 1 δ [10½ V Math 1 γ [9½	II Math 1 δ [10½ IV Math 8 γ [9½ VI Math 1 β [10		I Greek δ [2 III Greek ε [8 V Latin ε [14 IV English	I Greek δ [2 III Greek ε [8 V Latin γ [13 VI English	
5	II Math 8 γ [9½ IV Math 1 δ [10½ VI Math 1 β [10 I, III, V English	I Math 1 β [10 III Math 1 δ [10½ V Math 1 γ [9½ II, IV, VI English		II Greek δ [2 IV Greek ε [8 VI Latin ε [14 V English	II Greek δ [2 IV Greek ε [8 VI Latin γ [13 III English	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.

ACADEMIC FRESHMAN SECOND TERM SCHEDULE.—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		II, V Bible I French [4 IV German [3	III, VI Bible II French [4 IV German [3	I, IV Bible III French [4 VI German [3	II Latin δ [14 III Greek ε [9½ V Latin	I Latin γ [13 III Latin [7 V Latin
9	VII Math 2b β [10	III French [4 VI German [3	I French [4 V German [3	II French [4 V German [3	I Latin γ [13 IV Greek ε [9½ VI Greek	II Latin γ [13 VI Latin δ [14 IV Latin
10	I Math 4 α [9 III Math 4 δ [10½ V Math 4 γ [9½	I Math 4 α [9 III Math 4 δ [10½ V Math 4 γ [9½	I Greek δ [2 III Greek ε [9½ V Latin δ [14	I Latin δ [14 III Greek δ [2 V Greek ε [9½	II Latin γ [13 III Greek δ [2 V Latin δ [14	I Latin δ [14 III Latin γ [13 V Greek ε [9½
11	II Math 4 α [9 IV Math 4 δ [10½ VI Math 4 γ [9½	II Math 4 α [9 IV Math 4 δ [10½ VI Math 4 γ [9½	II Greek δ [2 IV Greek ε [9½ VI Latin δ [14	II Greek δ [2 IV Greek γ [9 VI Latin δ [14	I Greek δ [2 IV Greek γ [9 VI Latin δ [14	II Latin δ [14 IV Latin γ [13 VI Greek ε [9½
3	VII Math 2b β [10	VII Math 2b β [10				
4	I Math 2 γ [9½ III Math 2 β [10 V Math 2 δ [10½	I Math 2 γ [9½ III Math 2 β [10 V Math 2 δ [10½		I Greek ε [9½ III Latin δ [14 V Greek γ [2	I Greek ε [9½ III Latin δ [14 V Greek γ [2	
5	II Math 2 γ [9½ IV Math 2 β [10 VI Math 2 δ [10½	II Math 2 γ [9½ IV Math 2 β [10 VI Math 2 δ [10½		II Greek ε [9½ IV Latin δ [14 IV Greek γ [2	II Greek ε [9½ IV Latin δ [14 VI Greek $\frac{\text{IV}}{\text{VI}}$ γ [2	

Roman numerals indicate Divisions, Arabic numerals after brackets indicate rooms.

ACADEMIC SOPHOMORE FIRST TERM SCHEDULE.—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	II Greek α [7	I Greek α [7	BIBLE	IVb, VI HISTORY	I German [5	I German [5
9	I Greek α [7	II Greek α [7	I MATH [10½ III Latin [14	I MATH [10½ III Latin [14	I MATH [10½ II,IV,VI Zo & BOT.	II,IV, VI Zo.& BOT. I, IIIa HISTORY II German [5
10	I LATIN α [8 III GREEK β [12 V LATIN β [14	I LATIN α [8 III GREEK β [12 V LATIN β [14	II MATH [10½ II Latin [14	II MATH [10½ II Latin [14	II MATH [10½ II German [5	IIIb, V HISTORY III German [5
11	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	II LATIN α [8 IV GREEK γ [2 VI LATIN β [14	I Latin [14	I Latin [14	I, III,V Zo & BOT III German [5	I, III, V Zo.& BOT. II, IVa HISTORY
8	I GREEK β [12 III LATIN ε [14 V GREEK γ [2	I GREEK β [12 III LATIN ε [14 V GREEK γ [2		I, IIIa HISTORY	II, IVa HIST [5	
4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4	II GREEK β [12 IV LATIN ε [14 VI GREEK γ [2 III French [4		IIIb, V HISTORY II Math [9	IVb, VI HISTORY II Math [9	
5	II French [3 I French [4	II French [3 I French [4		I Math [9	I Math [9	

Required studies in SMALL CAPITALS. Roman Numerals indicate divisions, Arabic numerals after brackets indicate rooms.

Divisions independent in Required Classics and Required Mathematics. History, Zoology and Botany take mathematical divisions.

ACADEMIC SOPHOMORE SECOND TERM SCHEDULE.—1896–97.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8		I Greek γ [2	I Latin [14 II Greek [2	I Latin [14 II Greek [2	I German [3 II German [5	I German [3 II German [5
9	III Bible	II Greek γ [2	I, II Chem III Latin [14	I, II Chem III Latin [14	III German [3 I Bible	III German [3 II Bible
10	I Greek β [12 III Latin α [8 V Greek δ [2	I Greek β [12 III Latin α [8 V Greek δ [2	I Greek [2 II Latin [14	I Greek [2 II Latin [14	I Mechanics [10 III English IV German [3	I Mech [10 III Mech [10½ IV German [3
11	II Greek β [12 IV Latin α [8 VI Greek δ [2	II Greek β [12 IV Latin α [8 VI Greek δ [2	III, IV Chem	III, IV Chem	II Mech [10 IV English	II Mech [10 IV Mech [10½
8	I Latin δ [14 III Greek β [12 V Latin ε [13	I Latin δ [14 III Greek β [12 V Latin ε [13		I, II English	I English III Mech [10½	
4	II Latin δ [14 IV Greek δ [2 VI Latin ε [13 III French [4	II Latin δ [14 IV Greek δ [2 VI Latin ε [13 III French [4		III, IV English II Math [9	II English IV Mech [10½ II Math 9	
5	I French [4 II French [3	I French [4 II French [3		I Math [9	I Math [9	

Chemistry and English take Mechanics divisions.

ACADEMIC JUNIOR FIRST TERM SCHEDULE.—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I PHYSICS	Engl. Lit. 5	Engl. Lit. 5	*Italian* 1	*Italian* 1
9		II PHYSICS	*Hist. of Phil.*	*Hist. of Phil.*	I PSYCHOLOGY	I PSYCHOLOGY
10	*Public Law* *Art* 1	*Public Law* *Art* 1	Ancient Hist. *Bible* 5	Ancient Hist. *Bible* 5	French Lit.	French Lit.
11	Astronomy 1 *Spanish* 1	Astronomy 1 *Spanish* 1	Theor. Chem. 3 *Jurenal* 9 *Old English*	Theor. Chem. 3 *Juvenal* 9 *Old English*	II PSYCHOLOGY German	II PSYCHOLOGY German
8	*Geometry*	*Geometry*		Biology 3 *Diff. Equations*	Biology 3 *Diff. Equations*	
4	I PHYSICS	I PHYSICS		*Aristophanes* 9	*Aristophanes* 9	
5	II PHYSICS	II PHYSICS		*Geology* 3	*Geology* 3	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC JUNIOR SECOND TERM SCHEDULE.—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		I LOGIC	Engl. Lit. 6 Invert. Morph.	Engl. Lit. 6 Invert. Morph.	*Physics* 4 *Italian* 2 *Histology* 10	*Physics* 4 *Italian* 2 *Histology* 10
9		II LOGIC	*Hist. of Phil.*	*Hist. of Phil.*	POL. ECON.	POL. ECON.
10	*Am. Const. Law.* *Art* 2	*Am. Const. Law.* *Art* 2	History *Bible* 6	History *Bible* 6	French Lit.	French Lit.
11	Geology 2 *Spanish* 2	Geology 2 *Spanish* 2	Seneca 10 Prac. Bot. 4	Seneca 10 Prac. Bot. 4	POL. ECON.	POL. ECON.
8	*Geometry* *Eng. Phil.* Vert. Anat. 6	*Geometry* *Eng. Phil.* Vert. Anat. 6		Ex. Psy. (2 p. m.) *Diff. Equations* *Plato* 10	Ex. Psy. (2 p. m.) *Diff. Equations* *Plato* 10	
4	I LOGIC	I LOGIC		German	German	
5	II LOGIC	II LOGIC		*Geology* 4 *Anal. Mech.* Plautus	*Geology* 4 *Anal. Mech.* Plautus	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR FIRST TERM SCHEDULE.—1896–97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		Gothic Comp. Politics 9 H. P. Curves Osteology Roman Law	Gothic Comp. Politics 9 H. P. Curves Osteology Roman Law	Physiology Aristotle 18	Phys. Psych. *Italian* 1 English Lit. 9 Physics 9	Phys. Psych. *Italian* 1 English Lit. 9 Physics 9
9	Lucretius 18	Lucretius 18	*Hist. of Phil.*	*Hist. of Phil.*	French Lit. Aristotle 18	French Lit.
10	*Public Law* *Art* 1	*Public Law* *Art* 1	Lab. Chem. 5 German 18 *Bible* 5	Lab. Chem. 5 German 18 *Bible* 5	Latin 15 Ad. Gen. Psych 21	Latin 15 Ad. Gen. Psych. 21
11	Theism Pract. Physics Sanskrit *Spanish* 1	Theism Pract. Physics Sanskrit *Spanish* 1	Adv. Ex. Psych 19 History *Juvenal* 9 *Old English* Th. of Functions	Adv. Ex. Psych. 19 History *Juvenal* 9 *Old English* Th. of Functions	Pract. Astron. Poetics	Pract. Astron. Poetics
3	Old French Greek 11 *Geometry* Mamm. Anat. Hebrew	Old French Greek 11 *Geometry* Mamm. Anat. Hebrew		Finance German 15 Physiology *Diff. Equations* Hebrew	Finance German 15 *Diff. Equations* Hebrew	
4	Art 8 Astronomy 8 Hist. of Law	Art 8 Astronomy 8 Hist. of Law		Art. 5 Logic 9 Italian 8 *Aristophanes*	Art 5 Logic 9 Italian 8 *Aristophanes*	
5	ETHICS	ETHICS		German 17 Metaphysics *Geology* 8	German 17 Metaphysics *Geology* 8	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR SECOND TERM SCHEDULE.—1896–97

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Embryology H. Pl. Curves	Embryology H. Pl. Curves Latin 16	EV. OF CHR.	Latin 16 Palæontology	*Histology* 10 *Physics* 4 *Italian* 2 Engl. Lit. 10	*Histology* 10 *Physics* 4 *Italian* 2 Engl. Lit. 10
9	Amer. Lit. Phys. Geog.	Amer. Lit. Phys. Geog.	*Hist. of Phil.*	*Hist. of Phil.*	French Lit.	French Lit.
10	*Am. Const. Law* *Art* 2 Old French	*Am. Const. Law* *Art* 2 Old French	German 14 *Bible* 6 Palæontology	German 14 *Bible* 6	Palæontology Greek 14 Adv. Gen. Psy. 22	Palæontology Greek 14 Adv. Gen. Psy. 22
11	Theism Pract. Physics *Spanish* 2	Theism Pract. Physics. *Spanish* 2	Adv. Ex. Psy. 20 History Th. of Functions	Adv. Ex. Psy. 20 History Th. of Functions	Roman Law Pract. Ast. Prose Fiction	Roman Law Pract. Astron. Prose Fiction
3	Greek 12 *Geometry* *Eng. Phil.* Histology 12	Greek 12 *Geometry* *Eng. Phil.* Histology 12		Hist. Pol. Econ. German 16 *Plato* *Diff. Equations*	Hist. Pol. Ec. German 16 *Plato* *Diff. Equations*	
4	Cicero 14 Art 6 Eng. Com. Law	Cicero 14 Art 6 Eng. Com. Law		Art 4 Logic 10 Science & Rel.	Art 4 Logic 10 Science & Rel.	
5	Hebrew Sanskrit Outlines Phil.	Hebrew Sanskrit Outlines Phil.		Sociology Italian 4 Hebrew *Anal. Mech.* *Geology* 4	Sociology Italian 4 Hebrew *Anal. Mech.* *Geology* 4	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors.
Electives in Roman open to Seniors only. Electives scheduled at same hour are mutually exclusive.

JOHN C. GREEN SCHOOL OF SCIENCE.

ADMISSION.

ENTRANCE EXAMINATIONS.

All candidates for examination in Princeton must report at the Faculty room in the University Offices, the evening before the examination begins, or on their arrival the following morning. The first examination for admission will begin in Princeton on Thursday, June 17th, 1897, at 10 A. M., and will continue through the afternoon of Friday. The second will begin on Tuesday, September 21st, at 10 A. M., and continue through the afternoon of Wednesday. Applicants who have conditions or other deficiencies from the June examination are expected to remove them at the September examination. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations are held in the cities of New York, Philadelphia, Washington, Buffalo, Pittsburgh, Cincinnati, Louisville, Chicago, St. Louis, Omaha and Denver; and at preparatory schools and other cities when necessary. The precise places in which the examinations are to be held can be learned by application to the Registrar. Due notice of these examinations will also be published in leading local newspapers for several weeks in advance.

Examinations at other times and places than those specified are very inconvenient and often impracticable, and applicants for examination at other than the regular days are required to pay $10 into the treasury.

All candidates for admission must bring satisfactory testimonials of good moral character and attainments, preferably from their last instructors, and if the candidate has been a member of another college, university, or similar institution, he must produce a certificate from its President or Faculty that he is free from censure in the same.

Candidates for admission to the Freshman class must be at least sixteen years of age.

No candidate is admitted into the Undergraduate Department without an examination and a vote of the Faculty.

Immediately after the beginning of the Academic year, the students entering the Undergraduate Department meet according to announcement for matriculation and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other institution so long as we are members of Princeton University; it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

Freshman Entrance Requirements.

It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

Candidates for the course leading to the degree of Bachelor of Science are required to pass examinations in **1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 13,** of the following list of subjects; candidates for the course in civil engineering are required to pass examinations in **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13.**

Notice. Attention is called to the announcement that in June, 1898, and thereafter, candidates for the course leading to the degree of Bachelor of Science will also be required to pass examination in Algebra **7.**

In June, 1898, and thereafter, the entrance requirements in English will be identical with those of the Academic Department.

In 1897, the requirements as given for the Academic Department (**1** *English*) may be offered in Place of **1, 2** and **3** of the following list.

Each applicant for admission or for preliminary examination should be provided with a statement, signed by his teacher, as to his fitness to be examined in each of the subjects specified in the following list which he offers. This statement is merely for the information of the examiners, and is in no sense an admission cer-

tificate. Proper blanks will be supplied in advance to teachers, upon application to the Registrar of Princeton University.

1. *English Grammar.* Whitney or equivalent.

2. *Essay.* For 1897, the theme of the essay will be based on selections from Hawthorne's Twice Told Tales, George Eliot's Silas Marner, Scott's Marmion and Macaulay's Life of Samuel Johnson.

3. *United States History.* Johnston, Scott, or equivalent.

4. *Arithmetic.* Including only greatest common divisor and least common multiple; vulgar and decimal fractions; per centage apart from its commercial applications; square root; the metric system of weights and measures. Special emphasis is laid upon accuracy and facility in reckoning.

5. *Algebra.* Through quadratic equations involving two unknown quantities;—including evolution, radicals and fractional and negative exponents.

6. *Algebra.* Indeterminate equations of the first degree; ratio and proportion; variation; arithmetical and geometrical progression, and the binomial theorem with positive integral exponents.

7. *Algebra.* Undetermined coefficients and the binomial theorem with any exponent.

8. *Plane Geometry.*

9. *Solid Geometry.* Including the cylinder and cone.

10. *Plane Trigonometry.* Including the analytical theory of the trigonometrical functions and the usual formulæ, the use of trigonometrical tables and the solution of plane triangles.

11. *Latin.* Grammar, with special attention to parsing, and the retranslation from English into Latin of simple sentences from the first book of Cæsar; Translation, Cæsar (five books of the Gallic War), Cicero (the four orations against Catiline), or equivalents from other Latin authors.

12. *French.* The examination will be upon the general principles of grammar [*Otto:* pp. 28–201; or *Whitney:* Brief French Grammar, pp. 22–111; or *Edgren:* pp. VIII–LXIII, and 27–104], and the ability to translate easy prose; such as the first fifty pages of Whitney's Introductory French Reader or Super's French Reader, or of *G. Sand's* La Mare au Diable, (Macmillan's school edition), or *Erckmann-Chatrian's* Le Conscrit.

13. GERMAN. The examination will be upon the general principles of grammar [*Whitney:* pp. 28–153 and 278–284; or *Otto:* pp. 18–253; or *Huss:* pp. 9–101 of the Theoretical Part, the sections with heavy-faced references only], and the ability to translate easy prose; such as *Grimm's* Märchen (Otis's edition, pp. 1–49), or *Boisen's* German Prose (pp. 3–51), or *Joynes's* German Reader, Part II and pp. 85–110 of Part IV.

It is recommended that all candidates should receive instruction in free-hand drawing before their entrance.

PRELIMINARY EXAMINATIONS.

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. No candidate at the preliminary examination may receive a certificate unless he pass in at least four of the subjects enumerated above, nor will the preliminary certificate be granted to any candidate more than once.

The English Grammar **1**, Essay **2**, United States History **3** (or **1** *English*), Algebra **6**, **7**, Solid Geometry **9** and Trigonometry **10** may not be tried at the preliminary examination.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to an advanced class will be examined in the studies previously pursued by the class they propose to enter and may also be required to pass the regular examinations for admission to the Freshman class. While a certificate of satisfactory work done in any of these studies in another institution will not necessarily excuse from examination, it may in some degree modify the examination, and should therefore always be presented. Examinations for advanced standing are held only in Princeton.

ADMISSION TO SPECIAL COURSES.

Admission to special courses and the regulation of work therein are determined in the same way as for special courses in the Academic department.

EXAMINATIONS, STANDING AND GRADUATION.

EXAMINATIONS.

The regulations concerning examinations, conditions and the removal of conditions are the same as those for the students of the Academic department and are given on pp. 30–32; excepting that the regulations concerning conditions at the end of the Senior year and concerning thesis requirements are given below under the heading "Graduation."

STANDING.

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student during the term. In computing ranks, each study, elective or required, is estimated relatively to the others according to the number of hours which it occupies in the weekly schedule of lectures and recitations. The conduct of the student and his attendance also affect his standing according to the published rules of the Faculty. The maximum mark is one hundred; the minimum mark for passing in any subject is sixty. A report of the standing of each student is made to his parent or guardian by the Registrar at the close of the first term and at the end of the year. The last report gives the student's standing for the year.

The final rank of a student is calculated from all the marks received by the student during his course.

GRADUATION.

Each candidate for a degree is required to prepare and submit for the approval of an instructor, appointed by Faculty for the purpose, a graduation thesis. This shall be a design or review of some structure or process or an examination of some work or sub-

ject selected from some study specially connected with the scientific department. The subject selected for the graduation thesis must be reported to the Faculty, by the candidates for the degree of C. E. on or before the first Monday of October (October 5, 1896), and by the candidates for the degree of B. S. on or before the second Monday of January (January 11, 1897), of their Senior year. The graduation thesis must be finished by the second Saturday before Commencement (June 5, 1897), and the student may be required to read and defend his thesis in public during Commencement week.

Students who have fulfilled the requirements of their undergraduate courses, passing satisfactory examinations in all their studies and presenting acceptable graduation theses, are ordinarily recommended by the Faculty for the degree attached to the course they have pursued, and, if the recommendation is approved by the Trustees, the degree is conferred at Commencement and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

UNDERGRADUATE COURSES.

Undergraduate courses are provided for the degrees of Bachelor of Science and Civil Engineer.

The undergraduate courses offer, according to the choice of the student, efficient education in the natural sciences in general, or a thorough training in the study of civil engineering, and in various other branches of science, pure and applied. At the same time a liberal education in certain academic studies is secured to all candidates for a degree.

Instruction is given by lectures and recitations—by practice in the laboratories, drawing-rooms, museums and field—and excursions are made to different points of interest.

All candidates for the degree of Bachelor of Science pursue the same studies until the end of Sophomore year. At that time each student makes his election between the course in General Science and the course in Chemistry and he cannot afterward change his course without the permission of the Faculty.

Candidates for the degree of Civil Engineer pursue some studies in common with candidates for the degree of Bachelor of Science, but the divergence of the two courses commences at the very beginning.

Optional Courses.—The optional courses which are offered to the students of the Academic department, as given in the Statements of Courses, are also open to those students of the School of Science who may be fitted to pursue them with profit.

The following symbols are used to indicate the different courses:

a, all courses leading to the degree of Bachelor of Science.

g, the course in General Science.

c, the course in Chemistry.

e, the course in Civil Engineering.

DEPARTMENT OF SCIENCE.

COURSE IN GENERAL SCIENCE (*a*, *g*).

This is intended to afford instruction in science without necessarily specializing in any one department. Election to it must be made at the end of Sophomore year; during the Junior and Senior years the studies are largely elective. The choice of these elective studies is governed by the same rules as are in force in the Academic department as given on p. 88 and in the Regulations concerning Registration given on a later page under "General Orders."

These electives include many of those given in the Academic department and offer a wide variety of choice. A proper selection of electives in mathematics, mechanics and graphics furnishes a suitable preparation for the graduate course in Electrical Engineering. Students who contemplate entering the medical profession may combine the electives in Biology and Chemistry so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges.

A synopsis of the required and elective studies of the course will be found on a later page.

COURSE IN CHEMISTRY (*a*, *c*).

This course is designed to afford instruction in analytical and technical chemistry, and students electing it enter upon the special studies of the course at the beginning of Junior year.

The synopsis of the course is given on a later page.

DEPARTMENT OF CIVIL ENGINEERING (*e*).

The course in Civil Engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C. E.) The regular course of study occupies four years; but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts who have pursued elective courses in mathematics and Bachelors of Science can ordinarily be prepared for the degree of C. E. by a two-years course in the technical studies

required for that degree. But by a judicious selection of elective studies, a candidate for the degree of B. S. in the course in General Science can materially shorten the time which he will need for such preparation after receiving the bachelor's degree.

The regular course of study diverges from that in General Science at the beginning, but not so greatly as to make it difficult to change, if desirable, from one course to the other before the opening of the Sophomore year.

Besides the studies taken in common with the candidates for the degree of Bachelor of Science the technical work covers the following ground. A thorough preliminary training in mathematics is necessary for most of the technical studies.

RATIONAL AND APPLIED MECHANICS AND THEORY OF MACHINES is made to cover a wide field of study, beginning with the general discussion of motions and the action of forces, and ending with the deduction of practical formulas relating to the elasticity and strength of materials, the stability of different structures, the power, efficiency and strength of hydraulic, steam and air motors, and to the various problems which arise in the practice of hydraulic engineers. In dealing with these subjects, rigidly mathematical treatment is generally used, and higher analysis is freely employed wherever it is expedient; yet proper weight is given to methods of graphic analysis, and the student's attention is especially directed to those problems in which such methods are employed with marked advantage.

EXPERIMENTAL MECHANICS aims to familiarize the student with the physical properties of building materials; to teach him by actual experiment how to conduct tests and to deduce therefrom coefficients of strength, elasticity, etc.; how to determine coefficients of hydraulic flow and resistance; and how to gauge, by the aid of indicators and dynamometers, the power of steam and other motors. Under this head come also problems in the erection of structures.

THE PLANNING AND CONSTRUCTION OF ENGINEERING WORKS is treated in lectures. Great stress is laid on the application of correct principles and formulas; on the careful inspection, manipulation and preservation of materials, and on the economic features of various designs and modes of executing them.

An important feature of this part of the course consists of excursions for the examination of rolling mills, bridge works, machine

shops, water works, etc. In these visits the class is accompanied by either the Professor or Assistant Professor of Civil Engineering, and every member is required to make full notes of his observations and of the instruction received during the trip.

GEODESY, beginning with the measurements of lines and angles, extends through different kinds of surveys in the order of their complexity and ends with problems in higher geodesy. The structure, adjustment and use of each instrument are made subjects of special attention, and no student is allowed to participate in any extended field operation until he has acquired a certain dexterity in handling the instruments used therein. A marked feature of the course is the stress laid on the collection and verification of field notes by each student, and on their proper use in the preparation of different kinds of plans, maps and charts of surveys. No error is allowed, in field work or in platting, which is not within the limits observed in current practice.

TOPOGRAPHICAL DRAWING includes the execution, in pen work and colors, of finished plans and maps of various kinds of surveys. Except in the necessary preliminary drill, the drawings invariably represent actual surveys made by the different classes. A rigid adherence to the field notes of each survey and a high degree of finish are required in the execution of these drawings.

The synopsis of the course of study and the description of the laboratory, instruments and apparatus connected with the department are given on later pages.

STATEMENTS OF COURSES.

A number of studies are pursued either together with the Academic classes, or essentially as given in the statements of courses in the Academic department, and under the same instructors.

In the following statements of courses the numbers in brackets indicate the number of exercises a week.

English.

PROFESSOR PARROTT.

1, 2. Rhetoric and History of English Prose. *Genung:* Outlines of Rhetoric. Readings from the Bible, Bacon, Milton,

Bunyan, Defoe, Addison, Swift, Johnson, Lamb, De Quincey, Macaulay, Carlyle and Ruskin. Lectures and exercises in composition in connection with the required reading. Freshman, *a*, *e*; both terms [2].

8. Theme Writing. Exercises in extempore composition, with class-room criticism and discussion. *Fletcher and Carpenter:* Theme Writing. Sophomore, *a*; first term [1].

German.

PROFESSOR HUSS AND MR. PRIEST.

1. Review of the elements of grammar. Advanced grammar. Grammatical idioms. *Huss:* Conversation in German on a grammatical basis. Reading literary prose such as Storm's Immensee. Freshman, *a*, *e*; first term [2]. Mr. Priest. Monthly written recitations.

2. Review of advanced grammar. Reading literary prose such as von Hillern's Höher als die Kirche or Heyse's L'Arrabbiata. Committing German model sentences. Conversational exercises based thereon. Freshman, second term, *a* [2], *e* [1½]. Mr. Priest. Monthly written recitations.

3. Introductory scientific prose. The construction of the German period. Literary prose such as Chamisso's Peter Schlemihl. Conversational exercises. Sophomore *a*; first term [3]. Professor Huss. Sophomore, *e*; first term [2]. Mr. Priest.

4. Literary prose such as Schiller's Der Neffe als Onkel or Goethe's Wahrheit und Dichtung. Poetry: Lyrics; Goethe's Hermann und Dorothea. Sophomore, *a*; second term [3]. Professor Huss. Sophomore, *e*; second term [2]. Mr. Priest.

5. Schiller's dramas with lectures thereon. Junior, *c*, *g* elective; first term [2]. Professor Huss.

6. Lessing's critical writings and dramas. Junior *c*, *g* elective; second term [2]. Professor Huss.

7, 8. Goethe's Faust. Lectures on the medieval epics and on the life and works of Klopstock, Lessing, Wieland, Herder, Schiller, and Goethe. Scientific monographs. Composition. Senior, *c*, *g* elective; both terms [2]. Professor Huss.

French.

PROFESSOR LEWIS AND MR. CARTER.

1. French. Freshman, *a*, *e*; first term [2]. Professor Lewis or Mr. Carter. *Edgren:* French Grammar. *Verne:* Michel Strogoff. *Super:* French Reader.

2. French. Freshman, second term, *a* [2], *e* [1½]. Professor Lewis or Mr. Carter. *Edgren:* French Grammar. *Grandgent:* French Composition. *Ohnet:* Le Maître de Forges. *Dumas:* La Tulipe noire.

3. Advanced French. Sophomore, *a*, *e*; first term [2]. Professor Lewis or Mr. Carter. *Grandgent:* French Composition. *Dumas:* Les trois Mousquetaires.

4. Advanced French. Sophomore, *a*, *e*; second term [2]. Professor Lewis or Mr. Carter. *Grandgent:* French Composition. Writing in French of letters and short essays. *Freeborn:* Morceaux Choisis d'Alphonse Daudet. *Mérimée:* Colomba. *Hugo:* La Chute.

5. French Literature. Lectures on the principal authors of the 17th century. Junior, *g* elective; first term [2]. Professor Lewis. This course, as well as all the other French courses of the Junior and Senior years, are open only to those students who have satisfactorily completed the work preceding each separate course. All lectures in French Literature will be accompanied with considerable collateral reading beside the regular class-room work. *Fasnacht:* Select Specimens of the Great French Writers. *Corneille:* Polyeucte. *Molière:* Le Bourgeois Gentilhomme. *Racine:* Athalie. Sight reading from the 19th century writers.

6. French Literature. Lectures on the principal authors of the 18th century. Junior, *g* elective; second term [2]. Professor Lewis. *Fasnacht:* Select Specimens of the Great French Writers. *Voltaire:* Zaïre. *Montesquieu:* Lettres persanes. *Sedaine:* Philosophe sans le savoir. *Beaumarchais:* Le Barbier de Séville. *Beaumarchais:* Le Mariage de Figaro. *Bernardin de Saint-Pierre:* Paul et Virginie. Sight reading from the 19th century writers.

7. French Literature. Lectures on the principal authors of the 19th century. Senior, *g* elective; first term [2]. Professor Lewis. *Fontaine:* Les Prosateurs du 19e Siècle. *Warren:* Selections from Victor Hugo. *Hugo:* Hernani. *De Vigny:* Le Cachet Rouge. *Dumas:* L'Evasion du Duc de Beaufort. *Souvestre:* Le

Mari de Madame de Solange. *Musset:* Pierre et Camille. *Musset:* On ne badine pas avec l'amour. *Harper and Livingood:* Contes de Balzac. *Balzac:* Le Curé de Tours. *Augier:* Le Gendre de M. Poirier. *Pailleron:* Le monde où l'on s'ennuie. *Price:* Choix d'Extraits de Daudet. *Daudet:* Lettres de mon Moulin.

8. French Literature. Lectures on French Poetry. Senior, *g* elective; second term [2]. Professor Lewis. *Bowen:* French Lyrics. *Masson:* La Lyre française. *Warren:* Selections from Victor Hugo. *Hugo:* Légende des Siècles. *Lamartine:* Méditations. *Gautier:* Emaux et camées.

9, 10. Old French Readings. Senior, *g* elective, open also to Academic Seniors; both terms [2]. Professor Lewis. This course is open to all Seniors who have satisfactorily completed the previous three years' work in French. For the text-books used, see Nos. 11 and 12 of Academic French.

Mathematics.

PROFESSOR ROCKWOOD, MR. BROOKS, AND MR. REID.

1. Algebra. Freshman, *a*, *e;* first term [2½]. Mr. Reid. *Wells:* College Algebra.

2. Theory of Equations. Freshman, *a*, *e;* second term [2]. Mr. Reid. *Wells:* College Algebra.

3. Spherical Geometry. Freshman, *a*, *e;* half of first term [1]. Prof. Rockwood. *Wentworth:* Geometry.

5, 6. Trigonometry; plane with applications to mensuration, and spherical. Freshman, *a;* first term [2] and second term [1]. Mr. Brooks. *Wells:* Trigonometry.

7. Trigonometry; plane reviewed with applications to mensuration, spherical. Freshman, *e;* first term [2]. Mr. Reid. *Wells:* Trigonometry.

8. Analytical Geometry commenced. Freshman, *a;* second term [2]. Mr. Reid. *C. Smith:* Conic Sections.

9. Analytical Geometry of two dimensions. Sophomore, *a;* first term [4]. Professor Rockwood or Mr. Brooks. *C. Smith:* Conic Sections.

10. Analytical Geometry of two dimensions. Freshman, *e;* second term [3]. Prof. Rockwood. *C. Smith:* Conic Sections.

12. Differential and Integral Calculus. Sophomore, *a;* second term [4]. Prof. Rockwood or Mr. Brooks. *Osborne:* Calculus.

13. Differential Calculus. Sophomore, *e;* first term [4]. Prof. Rockwood. *Osborne:* Calculus.

14. Integral Calculus, with Elements of Differential Equations. Sophomore, *e;* second term [5]. Professor Rockwood. *Osborne:* Calculus and Lectures.

Physics.

PROFESSORS BRACKETT AND MAGIE, DR. WATERMAN, AND DR. LOOMIS.

1, 2. General Physics; mechanics, heat, magnetism, electricity, sound, light. Junior, *a, e;* both terms [4]. Dr. Loomis. *Anthony and Brackett:* Elementary Text-Book of Physics.

The elective courses in Physics for the Junior and Senior years are the same as those in the Academic department.

General Chemistry.

PROFESSOR MCCAY.

1, 2. Course in General Chemistry. Experimental lectures and recitations. Freshman, *a, e;* both terms [2]. Professor McCay. *Remsen:* Introduction to the Study of Chemistry.

Applied Chemistry and Mineralogy.

PROFESSOR CORNWALL, MR. NEHER, MR. PHILLIPS AND MR. SILL.

The term "exercises a week" in the statements below means *single hours* for lectures and recitations, but *exercises* of two or two and one-half hours each for laboratory work. Usually where a course embraces both class-room and laboratory work one-fourth of the exercises are in the class-room. Special students are not admitted to work in Analytical Chemistry and Mineralogy without previous examination as to their fitness for the work; and all such students must take the Mathematics of the Freshman year before beginning Mineralogy.

1, 2. Qualitative Analysis; including the commoner metals and acids, both in simple and mixed substances. Sophomore, *a;* one term [4]. Mr. Sill. *Neher:* Notes on Qualitative Analysis.

3, 4. Quantitative Analysis; introductory course, including simple salts, limestone, coal, felspar, etc., and sugars, milk and similar food analysis. Junior, *c;* first term [2], second term [5]. Professor Cornwall and Mr. Sill. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes.

5. Qualitative Analysis; advanced course. Junior, *c;* first term [2]. Professor Cornwall and Mr. Sill. *Fresenius:* Qualitative Chemical Analysis.

7. Organic Chemistry: lectures and recitations on typical organic compounds, with applications to study of water, foods, poisons, disinfectants, etc. Junior, *c, g* elective; first term [2]. Professor Cornwall.

8. Quantitative Analysis; shorter introductory course, including simple salts, sugar, foods, etc.; must be preceded by the lecture course 7. Senior, *g*, elective; second term [4]. Professor Cornwall and Mr. Sill. *Appleton:* Quantitative Analysis.

9, 10. Quantitative Analysis; advanced: including complex substances, Iron, Steel and Technical Analysis in general. Senior, *c;* first term [6], second term [6]. Professor Cornwall and Mr. Sill. *Fresenius:* Quantitative Chemical Analysis. *Neher:* Laboratory Notes. *Chemical Periodicals.*

11. Volumetric Analysis. Senior, *c;* first term [1]. Mr. Sill. *Mohr:* Titrirmethode. *Sutton:* Volumetric Analysis.

12. Technical Chemistry; lectures and recitations on applications of Chemistry to Arts and Manufactures; must be preceded by the lecture course 7. Senior, *c, g* elective; second term [1]. Professor Cornwall.

14. Assaying; furnace assay of gold, silver and lead ores; lectures and laboratory work. Junior and Senior, *c;* second term. [2]. Professor Cornwall and Mr. Phillips. *Ricketts:* Notes on Assaying.

15 or 16. Determinative Mineralogy (Blowpipe Analysis), preceded by a short course of lectures, including elements of crystallography. Sophomore, *a;* one term [4]; *e;* first term [3]. Professor Cornwall and Mr. Phillips. *Cornwall:* Manual of Blowpipe Analysis and Determinative Mineralogy.

17, 18. Mineralogy; advanced: lectures, recitations and practice in theoretical, determinative and optical mineralogy. Senior, *c, g* elective; both terms [1]. Professor Cornwall. *Moses and Parsons:* Mineralogy.

Biology.

PROFESSORS MACLOSKIE, LIBBEY, RANKIN AND MCCLURE.

2. Elementary Biology. Lectures, illustrated by skeletons, manikin and diagrams. Freshman, *a*; second term [1½]. Professor Macloskie.

3. Elementary Botany. Dissection, description and classification of flowering plants. Sophomore, *a*; first term [2]. Professor Rankin. *Macloskie:* Elementary Botany. *Gray:* Manual of Botany.

4. Elementary Zoology. Lectures and demonstrations. Sophomore, *a*; second term [3]. Professors Macloskie and Rankin. *Packard:* Zoology.

The elective courses in Biology for the Junior and Senior years are the same as for the Academic department. (See earlier page.)

Graphics.

PROFESSOR WILLSON AND MR. TORREY.

The following courses involve recitation and examination upon the theory, as well as practical work in the draughting-room.

1. Elementary Technical Draughting. Line and brush shading; conventional representations; lettering; higher plane curves; motion curves; oblique and orthographic projection; working drawings. Freshman, *a*; first term [3]; *e*; first term [3]. Professor Willson and Mr. Torrey. *Willson:* Theoretical and Practical Graphics.

2. Orthographic projection, continued; working drawings; tracings. Freshman, *e*; second term [2½]. Professor Willson and Mr. Torrey.

4. Technical Free-Hand Drawing. Freshman, *a*; second term [1½]. Mr. Torrey.

6. Practical graphical work; either bridges, roof trusses, machinery, or sheet metal pattern making. Sophomore, *e*; second term [1]. Professor Willson.

7. Descriptive Geometry; pure, and also as applied to developable, double-curved, and warped surfaces, and including spherical projections and trihedrals. Junior, *e*, *g* elective; first term [3]. Professor Willson. *Willson:* Theoretical and Practical Graphics.

8. Shades, Shadows, and Perspective; mathematical theory, with applications mainly to architectural subjects. Junior, *e*, *g* elective; second term [2]. Professor Willson and Mr. Torrey. *Church:* Shades, Shadows, and Perspective. *Wright:* Architectural Perspective.

9a. Stereotomy. Descriptive geometry, applied to the solution of problems in stone-cutting, which are likely to arise in railroad or architectural construction. Senior, *e*, *g* elective; part of first term [2]. Professor Willson. *Warren:* Stone-Cutting.

9b. Valve Motion. Senior *e*, *g* elective; part of first term [2]. Professor Willson. Lectures.

10. Mechanism (Theory) and Machine Drawing. Senior *e*, *g* elective; second term [2]. Professor Willson and Mr. Torrey. *Stahl and Wood:* Elementary Mechanism.

Surveying.

PROFESSOR SMITH.

1. Surveying. Theory and practice with special reference to business life. Junior, *g* elective; first term [2]. Professor Smith.

Mechanics.

PROFESSORS MCMILLAN AND SMITH AND MR. FRASER.

1, 2. Rational Mechanics; analytic and graphic. Junior, *e*, *g* elective; both terms [3]. Professor Smith and Mr. Fraser.

3. Elasticity and Strength of Materials. Senior, *e*, *g* elective; second year, *l;* first term [3]. Professor Smith.

5. Roofs and Bridges. Senior, *e;* first term [7]. Professor McMillan and Mr. Fraser.

6. Stability of Structures. Senior, *e;* second term [3]. Professor Smith.

8. Motors. Senior *e*, *g* elective; second term [4]. Professor McMillan and Mr. Fraser. *Rankine:* Steam Engine.

Constructions.

PROFESSORS MCMILLAN AND SMITH.

1. Structural Materials and Tests: Foundations. Senior, *e;* first term [2]. Professor Smith. Lectures and laboratory work.

2. Construction of Water Works. Senior, *e;* second term [2]. Professor Smith. Lectures.

4. Sewerage and Drainage. Senior, *e;* second term [2]. Professor McMillan. Lectures.

6. Roads. Senior, *e;* second term [2]. Professor McMillan. Lectures.

Geodesy.

PROFESSOR HARRIS AND MR. FRASER.

2. Line measurement and farm surveying; recitations and field work. Freshman, *e;* second term [1½]. Mr. Fraser. *Staley-Gillespie:* Land Surveying.

3. Platting of field notes; topographical drawing in pen work and colors. Sophomore, *e;* first term [5]. Professor Harris and Mr. Fraser. *McMillan-Smith:* Topographical Drawing.

4. Transit work and levelling; recitations, field work and mapping. Sophomore, *e;* second term [6]. Professor Harris. *Staley-Gillespie:* Land Surveying.

5. Town, mine and hydrographic surveying; recitations, field work and mapping. Junior, *e;* first term [4]. Professor Harris. Lectures.

6. Railroad surveying; recitations, field work and office work. Junior, *e;* second term [5]. Professor Harris. *Searles:* Field Engineering.

DEPARTMENT OF ELECTRICAL ENGINEERING.

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The special course of study in electricity occupies two years of graduate work.

REQUIREMENTS FOR ADMISSION.

I. Graduates of the University, either in the Academic Department or in the John C. Green School of Science, who have taken satisfactory courses, will be admitted to the course in Electrical Engineering without examination.

II. Applicants who are graduates of other institutions must satisfy the Professors in charge that they have sufficient knowledge of mathematics, including differential and integral calculus, of physics and chemistry, and of French and German, to enable them to pursue the course with profit.

III. Applicants who are not graduates of any institution may be admitted to the course if they show their fitness for it on examination in mathematics to the completion of the calculus, analytic mechanics, mechanical drawing and descriptive geometry, general and analytical chemistry, geology, astronomy, English language and literature, French and German.

IV. Students, not candidates for a degree, may be received by special arrangements with the Professors in charge.

Course of Study.

First Year :—The mathematical theory of Electricity. *Duhem:* Leçons sur l'Électricité et le Magnétisme: *Maxwell* and other authors.

Elementary Electrical Measurements, with reference to Stewart and Gee, Kohlrausch, Slingo and Brooker, Gray, etc. Two days in the week are left free for this work.

Strength of Materials and Mechanism, each, two hours a week, and Theory of Machines, three hours a week for half the year, are taken with the Senior Class in the Civil Engineering Department.

Second Year :—The Theory of Electrical Measurements. *Fleming:* Alternate Current Transformer. *Kittler*, *Drude*. Four hours a week for half the year.

Theory of Dynamo Construction. *Thompson:* Dynamo Electrical Machinery, with collateral lectures.

Technical Applications of Electricity in Telegraphy, Electrometallurgy and Electro-chemistry, Electric lighting, Transmission of power.

Advanced Electrical Measurements and Electrical Testing.

In addition to these courses a meeting is held once a week, at which reports on the current electrical literature are made by the students.

Degree.

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application, he must present a thesis on some subject connected with electrical science.

EXHIBIT OF STUDIES.

NOTE.—The numbers in column indicate exercises per week. The numbers immediately after subjects refer to courses as given on pp. 91-99. The Roman and Arabic numerals in parentheses refer to subjects and courses as given in the Statement of Courses for the Academic Department on pp. 38–63.

COURSE IN GENERAL SCIENCE (*a*, *g*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 3, 5	5	Mathematics 2, 6, 8	5
German 1	2	German 2	2
French 1	2	French 2	2
Graphics 1	3	Graphics 4	1½
General Chemistry 1	2	General Chemistry 2	2
English 1	2	Biology 2	1½
		English 2	2

SOPHOMORE YEAR.

Mathematics 9	4	Mathematics 12	4
German 3	3	German 4	3
French 3	2	French 4	2
Applied Chemistry 1 or Mineralogy 15	4	Applied Chemistry 2 or Mineralogy 16	4
Botany—Biol. 3	2	Zoology—Biol. 4	3
English	1		

JUNIOR YEAR.

REQUIRED.

Physics 1	4	Physics 2	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 7 or 8 exercises.		Student takes 6 or 7 exercises.	
German 5	2	German 6	2
French 5	2	French 6	2
Spanish (XVI 1)	2	Spanish (XVI 2)	2
Public Law (IV 1)	2	Am. Const. Law (IV 2)	2
Art (VI 1)	2	Art (VI 2)	2
Graphics 7	3	Graphics 8	2
Graphics 7	3	Pract. Botany (XXIV 4)	2
Ancient History (III 5)	2		
Bible (XVII 5)	2	English Philology (X 8)	2
Geometry (XVIII 11)	2	Geometry (XVIII 12)	2
Applied Chem. 7	2	Vert. Anatomy (XXIV 6)	2
Ancient History (III 5)	2		
Bible (XVII 5)	2	Bible (XVII 6)	2
Applied Mech's 1	3	Applied Mech's 2	3
Italian (XV 1)	2	Italian (XV 2)	2
History (III 3)	2	Physics (XX 4)	2
Diff. Equations (XVIII 9)	2	Diff. Equations (XVIII 10)	2
Biology (XXIV 3)	2	Histology (XXIV 10)	2
Theor. Chemistry (XXI 3)	2	Exp. Psychology (II 6)	2
Old English (X 17)	2	Invert. Morph. (XXIV 8)	2
English Lit. (X 5)	2	English Lit. (X 6)	2
Surveying 1	2	Anal. Mechanics (XX 6)	2
Geology (XXIII 3)	2	Geology (XXIII 4)	2

SENIOR YEAR.

REQUIRED.

Ethics (I 1)	2	Evid. Christianity (I 2)	1
		Political Econ. (V 2)	3

ELECTIVE.

Bracketed subjects are mutually exclusive, and only one subject in any bracketed group may be elected.

Student takes 12 or 13 exercises.	Student takes 11 or 12 exercises.	
	American Lit. (X 12)	2
	Physical Geog. (XXII 2)	2
	French 8	2

Public Law (IV 1)	2
Art (VI 1)	2
Theism (I 7)	2
Pract. Physics (XX 9)	2
Spanish (XVI 1)	2
Geometry (XVIII 11)	2
Old French 9	2
Mamm. Anat. (XXIV 15)	2
Art (VI 8)	2
Astronomy (XIX 8)	2
Hig. Pl. Cur. (XVIII 15)	2
Osteology (XXIV 11)	2
Graphics 9	2
Hist. of Philos. (II 8)	2
German 7	2
Bible (XVII 5)	2
Exp. Psych. (II 17)	2
Old English (XI 7)	2
Theor. of Func. (XVIII 17)	2
Str. of Materials 8	3
Metaphysics (II 13)	2
Geology (XXIII 8)	2
Diff. Equations (XVIII 9)	2
Physiology (XXIV 13)	2
Physiology (XXIV 13)	2
Graphics 9	2
Art (VI 5)	2
Logic (II 9)	2
Italian (XV 8)	2
Italian (XV 1)	2
English Lit. (X 9)	2
Phys. Psychology (II 15)	2
Physics (XX 11)	2
Mineralogy 17	1
French 7	2
Ad. Gen. Psych. (II 19)	2
Pract. Astron. (XIX 5)	2
Poetics (XI 9)	2

Am. Const. Law (IV 2)	2
Art (VI 2)	2
Old French 10	2
Anal. Chem. 8	4
Theism (I 8)	2
Pract. Physics (XX 10)	2
Spanish (XVI 2)	2
Geometry (XVIII 12)	2
Histology (XXIV 12)	2
English Philology (X 8)	2
Art (VI 6)	2
Outlines of Philos. (II 14)	2
Embryology (XXIV 14)	2
Motors 8	4
Hig. Pl. Cur. (XVIII 16)	2
Palæontology (XXIV 16)	4
Pract. Astron. (XIX 6)	2
Anal. Chem. 8	4
Hist. of Philos. (II 4)	2
German 8	2
Graphics 10	2
Palæontology (XXIV 14)	4
Bible (XVII 6)	2
Exp. Psych. (II 18)	2
Theor. of Func. (XVIII 18)	2
Italian (XV 4)	2
Sociology (III 16)	2
Anal. Mech's (XX 6)	2
Motors 8	4
Geology (XXIII 4)	2
Hist. Polit. Econ. (V 4)	2
Diff. Equations (XVIII 10)	2
Art (VI 4)	2
Logic (II 10)	2
Tech. Chem. 12	1
Science and Relig. (I 4)	2
Italian (XV 2)	2
Histology (XXIV 10)	2
Mineralogy 18	1
Physics (XX 4)	2
English Lit. (X 10)	2

COURSE IN CHEMISTRY (*a*, *c*).

The studies of the Freshman and Sophomore years are the same as those in the course in General Science.

JUNIOR YEAR.

First Term.		*Second Term.*	
Physics 1	4	Physics 2	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Psychology (II 1)	2	Logic (II 2)	3
German 5	2	German 6	2
Applied Chem. 3, 5, 7	6	Applied Chem. 4	5

SENIOR YEAR.

Ethics (I 1)	2	Evid. Christianity (I 2)	1
German 7	2	German 8	2
Theor. Chemistry (XXI 3)	2		
Applied Chem. 9, 11, 17	3	Ap. Chem. 10, 12, 14 18,	11
Elective (from list open to Seniors in General Science course)	2	Elective (from list open to Seniors in General Science course)	2

COURSE IN CIVIL ENGINEERING (*c*).

FRESHMAN YEAR.

First Term.		*Second Term.*	
Mathematics 1, 3, 7	5	Mathematics 2, 4, 6	5
German 1	2	German 2	1½
French 1	2	French 2	1½
Graphics 1	3	Graphics 3	2½
General Chemistry 1	2	General Chemistry 3	2
English 1	2	English 2	2
		Geodesy 2	1½

SOPHOMORE YEAR.

Mathematics 13	4	Mathematics 14	5
German 3	2	German 4	2
French 3	2	French 4	2
Geodesy 3	5	Geodesy 4	6
Mineralogy 5	3	Graphics 6	1

JUNIOR YEAR.

Physics 1	4	Physics 2	4
Astronomy (XIX 1)	2	Geology (XXIII 2)	2
Mechanics 1	8	Mechanics 2	8
Geodesy 5	4	Geodesy 6	5
Graphics 7	8	Graphics 8	2

SENIOR YEAR.

Astronomy (XIX 5)	2	Evid. Christianity (I 2)	1
Str. of Materials 3	8	Stab. of Structures 6	3
Roofs and Bridges 5	7	Motors 8	4
Constructions 1	2	Water Works 2	2
Graphics 9	2	Drainage 4	2
		Roads 6	2
		Graphics 10	2

SCHOOL OF SCIENCE FRESHMAN FIRST TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	English *a* 3	English *a* 3	Graphics *a* 2 Math. *a* 3	Graphics *a* 1 Trig. *a* 2 Math. *e*	Graphics *a* 1 Algebra *e*	Graphics *a* Algebra *e*
9	Chemistry *a* 1 Chemistry *e* English *a* 2	Chemistry *a* 1 Chemistry *e* English *a* 2	Trig. *a* 1 Trig. *e*	Trig. *a* 3	Algebra *a* 3	
10	English *a* 1	English *a* 1	Graphics *a* 3 Algebra *a* 1	Graphics *a* 2 Algebra *a* 3	Trig. *a* 1 Algebra *a* 2 Graphics *a* 3	Algebra *a* 1 Graphics *e*
11	Chemistry *a* 2, 3 English *e*	Chemistry *a*, 2, 3 English *e*	Math. *a* 2 German *e*	Math. *a* 1 German *e*	Trig. *a* 2 Trig. *e*	Algebra *a* 2 Trig. *a* 3
3	German *a* 1	German *a* 1		French *a* 1 Graphics *e*	French *a* 1 Graphics *e*	
4	German *a* 2	German *a* 2		French *a* 2	French *a* 2	
5	German *a* 3 French *e*	German *a* 3 French *e*		French *a* 3	French *a* 3	

SCHOOL OF SCIENCE FRESHMAN SECOND TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			Graphics *a* 1 Theor. Eqs. *a* 3 Graphics *e*	Theor. Eqs. *a* 1 Graphics *a* 3 Graphics† *e* French* *e*	Graphics† *a* 1 Theor. Eqs. *e*	Graphics† *a* 3 Biology* *a* Theor. Eqs. *e*
9	Chemistry *a* 1 English *a* 2 Chemistry *e*	Chemistry *a* 1 English *a* 2 Chemistry *e*	Theo. Eqs. *a* 2	Theor. Eqs. *a* 2	Conics *a* 2	Conics *a* 2
10	English *a* 3	English *a* 3	Theo. Eqs. *a* 1 Graphics *a* 2 Trig. *a* 3	Trig. *a* 1 Theor. Eqs. *a* 3 Geodesy* *e*	Graphics† *a* 2 Conics *a* 3	Conics *a* 1 Conics *e*
11	English *a* 1 Chemistry *a* 2, 3 German† *e* French* *e*	English *a* 1 Chemistry *a* 2, 3 German *e*	Conics *e*	Trig. *a* 2 French† *e*	Conics *a* 1 Conics *e*	Conics *a* 3
8	Biology* *a*	Biology* *a*		German *a* 1 French *a* 3 Graphics† *e* Geodesy* *e*	German *a* 1 French *a* 3 Graphics† *e* Geodesy* *e*	
4	English *e*	English *e*		German *a* 2	German *a* 2	
5	French *a* 2	French *a* 2		French *a* 1 German *a* 3	French *a* 1 German *a* 3	

†During first half of the term. *During second half of the term.

SCHOOL OF SCIENCE SOPHOMORE FIRST TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 2 Geodesy *e*	French *a* 2 Mineral. *e*	German *a* 1	German *a* 2	Math. *a* 2 Math. *a* 3	Math. *a* 2 Math. *a* 3
9	German *a* 1 French *a* 3	German *a* 1 French *a* 3	Botany. *a* Math. *e*	German *a* 3 Math. *e*	Math. *a* 1 Math. *e*	Math. *a* 1 Math. *e*
10	German *a* 2	Botany *a* 1 German *a* 2	Math. *a* 2 Math. *a* 3 Mineral. *e*	Math. *a* 2 Math. *a* 3 Mineral. *e*	An. Chem. *a* I Mineral. *a* II Geodesy *e*	An. Chem. *a* I Mineral. *a* II Geodesy *e*
11	German *a* 3 German *e*	German *a* 3 German *e*	Math. *a* 1	Math. *a* 1		
3	French *a* 1 English *a* 3	French *a* 1 Botany *a* 3		An. Chem. *a* I Mineral. *a* II Geodesy *e*	An. Chem. *a* I Mineral. *a* II Geodesy *e*	
4	English *a* 2 French *e*	Botany *a* 2 French *e*				
5	English *a* 1					

SCHOOL OF SCIENCE SOPHOMORE SECOND TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	French *a* 2 Graphics *e*	French *a* 2	Math. *a* 1 Math. *a* 2	Math. *a* 1 Math. *a* 2	Math. *a* 1 Math. *a* 2	Math. *a* 1 Math. *a* 2
9	German *a* 1 French *a* 3	German *a* 1 French *a* 3 Math. *e*	Math. *a* 3 Math. *e*	Math. *a* 3 Math. *e*	Math. *a* 3 Math. *e*	Math. *a* 3 Math. *e*
10	Zoology *a* Geodesy *e*	Zoology *a* Geodesy *e*	Mineral. *a* I An. Chem. *a* II	Mineral. *a* 1 An. Chem. *a* II	Mineral. *a* 1 An. Chem. *a* II Geodesy *e*	Mineral. *a* I An. Chem. *a* II Geodesy *e*
11			German *e*	German *e*		
3	French *a* 1 German *a* 2 Geodesy *e*	French *a* 1 German *a* 2 Geodesy *e*		Zoology *a*	German *a* 2	
4	German *a* 3	German *a* 3		French *e*	French *e*	
5				German *a* 1	German *a* 3	

SCHOOL OF SCIENCE JUNIOR FIRST TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 5 *g* Surveying *g*	English Lit. 5 *g* Surveying *g*	Italian 1 *g*	Italian 1 *g*
9	Astronomy *a,e*	Astronomy *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*	Physics *a,e*
10	Public Law *g* Art 1 *g* Graphics *g,e* Ap. Chem. 8 *c*	Public Law *g* Art 1 *g* Graphics *g,e* Ap. Chem. 8 *c*	Ancient Hist. *g* Bible 5 *g* Graphics *g,e* Ap. Chem. 5 *c*	Ancient Hist. *g* Bible 5 *g* Ap. Mechs. 1 *g* Ap. Chem. 5 *c*	Ap. Mechs. 1 *g*	Ap. Mechs. *g*
11	Spanish 1 *g*	Spanish 1 *g*	Theor. Chem. 8 *g* Old English *g*	Theor Chem. 8 *g* Old English *g* Ap. Mechs. 1 *e*	Psychology *a* Ap. Mechs. 1 *e*	History 8 *g* Ap. Mechs. 1 *e*
8	Geometry 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*	Geometry 11 *g* Ap. Chem. 7 *g,c* Geodesy *e*		Biology 3 *g* Diff. Equations *g* Geodesy *e*	Biology 3 *g* Diff. Equations *g* History 3 *g* Geodesy *e*	
4	French *g*	French *g*		German *g,c*	German *g,c*	
5	Psychology *a*			Geology 3 *g*	Geology 3 *g*	

SCHOOL OF SCIENCE JUNIOR SECOND TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8			English Lit. 6 *g* Invert. Morph. *g* Geodesy *e*	English Lit. 6 *g* Invert. Morph. *g*	Physics 4 *g* Italian 2 *g*	Physics 4 *g* Italian 2 *g* Geodesy *e*
9	Geology 2 *a,e*	Geology 2 *a,e*	Logic *a*	Physics *a,e*	Physics *a,e*	
10	Am. Const. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Am. Const. Law *g* Art 2 *g* Ap. Chem. 4 *c* Graphics *g,e*	Bible 6 *g* Ap. Chem. 4 *c* Geodesy *e*	Bible 6 *g* Ap. Chem. 4 *c* Ap. Mechs. 2 *g*	Ap. Mechs. 2 *g*	Ap. Mechs. 2 *g*
11	Spanish 2 *g*	Spanish 2 *g*	Pract. Bot. 4 *g*	Pract. Bot. 4 *g* Ap. Mechs. 2 *e*	Logic *a* Ap. Mechs. 2 *e*	Logic *a* Ap. Mechs. 2 *e*
8	Geometry 12 *g* Eng. Phil. *g* Vert. Anatomy *g*	Geometry 12 *g* Eng. Phil. *g* Vert. Anatomy *g*		Ex. Psy. (2 p.m.) *g* Histol. 10 (2p.m.) *g* Diff. Equations *g* Geodesy *e*	Ex. Psy. (2 p.m.) *g* Histol. 10 (2p.m.) *g* Diff. Equations *g* Geodesy *e*	
4	French *g*	French *g*		German *g,c*	German *g,c*	
5	Physics *a,e*	Physics *a,e*		Geology 4 *g* Anal. Mechs. *g*	Geology 4 *g* Anal. Mechs. *g*	

SCHOOL OF SCIENCE SENIOR FIRST TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8		H. P. Curves *g* Osteology *g*	H. P. Curves *g* Osteology *g* Graphics *g,e*	Physiology *g* Graphics *g,e*	Phys. Psych. *g* Italian 1 *g* Physics 11 *g* Eng. Lit. 9 *g* Ap. Chem. 11 *c*	Phys. Psych. *g* Italian 1 *g* Physics 11 *g* Eng. Lit. 9 *g* Mineralogy 17 *g,c*
9	French *g* R. & Bridges *e*	French *g* R. & Bridges *e*	Hist. of Phil. *g*	Hist. of Phil. *g*	Str. Mats. *g,e*	Str. Mats. *g,e*
10	Public Law *g* Art 1 *g* Ap. Chem. 9 *c*	Public Law *g* Art 1 *g* Ap. Chem. 9 *c*	Bible 5 *g* German *g,c*	Bible 5 *g* German *g,c*	Ap. Chem. 9 *c*	Ap. Chem. 9 *c*
11	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Theism *g* Pract. Physics *g* Spanish 1 *g* R. & Bridges *e*	Ex. Psy. *g* Old English *g* Theor. of Fns. *g* Str. Mats. *g,e* Theor. Chem. *c*	Ex. Psy. *g* Old English *g* Theor. of Fns. *g* R. & Bridges *e* Theor. Chem. *c*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych. *g*	Pract. Astron. *g,e* Poetics *g* Ad. Gen. Psych. *g*
3	Old French *g* Geometry 11 *g* Mamm. Anat. *g*	Old French *g* Geometry 11 *g* Mamm. Anat. *g*		Physiology *g* Diff. Equations *g*	Diff. Equations *g* Ap. Chem. 9 *c*	
4	Art 8 *g* Astronomy 8 *g* R. & Bridges *e*	Art 8 *g* Astronomy 8 *g* R. & Bridges *e*		Art 5 *g* Logic 10 *g* Italian 8 *g* Constructions 1 *e*	Art 5 *g* Logic 10 *g* Italian 8 *g* Constructions 1 *e*	
5	Ethics *a*	Ethics *a*		Metaphysics *g* Geology 8 *g*	Metaphysics *g* Geology 8 *g*	

SCHOOL OF SCIENCE SENIOR SECOND TERM SCHEDULE—1896-97.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Embryology *g* High. P. Curves *g* Motors *g,e*	Embryology *g* High. P. Curves *g* Motors *g,e*	Ev. of Chr. *a,e*	Palæontology *g* An. Chem. 8 *g* An. Chem. 10 *c* Stab. Structs. *e*	Histology 10 *g* Physics 4 *g* Italian 2 *g* Eng. Lit. 10 *g* Assaying 14 *c* Stab. Structs. *e*	Histology 10 *g* Physics 4 *g* Italian 2 *g* Engl. Lit. 10 *g* Mineralogy 18 *c,g* Stab. Structs. *e*
9	Amer. Lit. *g* Phys. Geog. *g* French *g*	Amer. Lit. *g* Phys. Geog. *g* French *g*	Hist. of Phil. *g*	Hist. of Phil. *g*	Pol. Econ. *a*	Pol. Econ. *a*
10	Am. Const. Law *g* Art 2 *g* Old French *g* An. Chem. 8 *g* An. Chem. 10 *c*	Am. Const. Law *g* Art 2 *g* Old French *g* An. Chem. 8 *g* An. Chem. 10 *c*	Bible 6 *g* German *c,g* Graphics *e,g* Palæontology *g*	Bible 6 *g* German *c,g* Graphics *e,g*	Palæontology *g* Pract. Astron. *g*	Palæontology *g* Pract. Astron. *g* An. Chem. 8 *g*
11	Theism *g* Pract. Physics *g* Spanish 2 *g* Water Works *e*	Theism *g* Pract. Physics *g* Spanish 2 *g* Water Works *e*	Exp. Psyc. *g* Theor. of Fns. *g*	Ex. Psy. *g* Theor. of Fns. *g*	Pol. Econ. *a* Drainage *e*	Pol. Econ. *a* Drainage *e*
8	Geometry *g* Engl. Phil. *g* Histology 12 *g* An. Chem. 10 *c*	Geometry *g* Engl. Phil. *g* Histology 12 *g* An. Chem. 10 *c*		Hist. Pol. Econ. *g* Diff. Equations *g*	Hist. Pol. Econ. *g* Diff. Equations *g* An. Chem. 10 *c*	
4	Art 6 *g*	Art 6 *g*		Art 4 *g* Logic 10 *g* Science & Relig. *g* Tech. Chem. 12 *c,g*	Art 4 *g* Logic 10 *g* Science & Relig. *g*	
5	Outlines of Phil. *g* Roads *e*	Outlines of Phil. *g* Roads *e*		Italian 4 *g* An. Mechs. 6 *g* Geology 4 *g* Sociology *g* Motors *g,e*	Italian 4 *g* An. Mechs. 6 *g* Geology 4 *g* Sociology *g* Motors *g,e*	

GRADUATE DEPARTMENT.

Immediately after the beginning of the Academic year, students entering the Graduate Department who are graduates of any approved institution other than Princeton University, or who, if graduates of Princeton University, have afterwards matriculated in some other university, meet according to announcement for matriculation. The courses of study open to graduate students are given under the following regulations:

Every instructor in the University shall be at liberty, with the leave of the Faculty, to give instruction to graduates. He shall meet with his class for at least one hour a week, and not more than three hours a week, during the Academic year, and shall require the members of his class to undergo examinations on the course pursued.

Each graduate student attending instruction regularly, and passing the examinations, is entitled to a certificate stating what he has done, signed by the President in behalf of the University.

Students by pursuing these courses may also qualify themselves for the degrees: Master of Arts, Master of Science, Doctor of Philosophy, or Doctor of Science, according to the regulations prescribed under the heading "Degrees."

Each graduate student shall pay ten dollars, or such sum as the Faculty may require, for every course of instruction that he enters requiring an hour per week, and shall defray whatever expense may be incurred by the use of instruments and materials employed by him. This charge may be remitted in whole or in part when the circumstances of the student require it. All undergraduate courses of lectures or instruction are also open to graduate students without the payment of any fees except for material used. Charges will be made for courses in analytical chemistry, the amount to depend on the nature of the course pursued.

Arrangements for the particular courses should be made by application to the individual instructors.

GRADUATE COURSES.

The following courses are classed as Graduate courses and are such as may properly be attended by candidates for the Master's or Doctor's degree. As may be seen from the more detailed statements to which reference is made, some of these courses are open to graduates only, while others are also undergraduate electives. In many subjects other special courses may be arranged on consultation with the professors.

MORAL PHILOSOPHY: Courses 1 to 9.

MENTAL PHILOSOPHY: Courses 8 to 31.

HISTORY AND POLITICAL SCIENCE: Courses 5 to 16.

JURISPRUDENCE: Courses 1 to 8.

POLITICAL ECONOMY: Courses 8 and 4.

ARCHÆOLOGY AND THE HISTORY OF ART: Courses 8 to 6.

GREEK: Courses 15 to 22.

LATIN: Courses 17 to 24.

SANSKRIT: Courses 1 to 6.

ENGLISH: Courses 18 to 20.

ORATORY AND ÆSTHETIC CRITICISM: Courses 9 and 10.

GERMAN: Courses 18 to 20.

FRENCH: Courses 7 to 20.

ITALIAN: Courses 3 to 6.

BIBLICAL LITERATURE: Courses 7 and 8.

MATHEMATICS: Courses 11 to 26.

ASTRONOMY: Courses 7 to 10.

PHYSICS, Courses 11 to 18.

PHYSICAL GEOGRAPHY: Course 4.

GEOLOGY: Courses 3 and 4.

CHEMISTRY: For statement of courses see the courses offered in the School of Science.

BIOLOGY: An advanced course in Biology has been established in connection with the Geological, Zoological, Botanical, and Chemical departments, the objects in view being: (1) to foster a spirit of original research, (2) to qualify advanced students to become teachers. This course is open to college graduates, also to students presenting diplomas from recognized medical schools.

It is not restricted to students who are candidates for a degree, if the applicants possess sufficient elementary knowledge to profit by the instruction.

This course is of a comprehensive and elastic character, and according to the requirements and wishes of different students, includes much laboratory work under the direction of the instructor. At the close of the first term, the student may select a department of special study for his thesis, which must present the results of original work.

DEGREES.

Students of the University, who have passed all the examinations of their undergraduate courses and fulfilled all the prescribed conditions are ordinarily recommended by the Faculty for a degree. The degrees thus given are Bachelor of Arts (p. 84), Bachelor of Science (p. 89), and Civil Engineer (p. 89). The degree of Electrical Engineer (p. 100) is given to those students who have fulfilled the requirements of the School of Electrical Engineering.

Master of Arts. (A.M.)

The degree of Master of Arts may be conferred only upon a Bachelor of Arts of this or of any approved institution who shall have devoted one year exclusively to graduate study in the University under the care of the Faculty, passing examinations upon the studies pursued; or shall have taken at least one graduate course each term for two years and passed satisfactory examinations upon his work. The degree may also be conferred upon a Bachelor of Arts of this University who shall have submitted to the Faculty a satisfactory dissertation, ordinarily of not less than five thousand words, on some literary, philosophical or scientific subject, not earlier than the first of April in the third year after graduation. The fee for this degree is ten dollars, to be paid to the University Treasurer either before the candidate enters his last examinations, or else when his dissertation is handed in.

Master of Science. (M.S.)

The degree of Master of Science may be conferred upon any Bachelor of Science of an approved institution who shall have devoted one year exclusively to graduate study in the University under the care of the Faculty in such of the following subjects as the Faculty shall prescribe, and who shall have shown satisfactory proficiency therein by dissertations and examinations: biology, mathematics, rational and applied mechanics, practical astronomy, applied chemistry, qualitative analysis, quantitative analysis, physics, mineralogy, graphics, modern languages.

Any Bachelor of Arts, who after examination may be found to be prepared to pursue a graduate course in science, may become a candidate for the degree of Master of Science on the same conditions as a Bachelor of Science. The fee for this degree is ten dollars, to be paid to the University Treasurer before the candidate enters his last examinations.

Degree of Doctor of Philosophy (Ph.D.) in Princeton University.

Subject to the regulations hereinafter stated, the degree of Doctor of Philosophy may be conferred upon any Bachelor of Arts of Princeton University, or of any approved institution whose Academic course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Arts, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

Regulations.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the Academic year in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study. They are also examined in the group of subjects connected with the general department of their proposed studies as detailed below:

A. In the Department of Philosophy: Ability to read Latin with a fluency sufficient to ensure its use as an instrument of advanced study; general psychology and logic; history of philosophy, ancient and modern; outlines of general history.

B. In the Department of Language and Literature: Outlines of general history; general knowledge of the English language and literature; ability to read Greek and Latin with fluency sufficient to ensure their use as instruments of advanced study.

C. In one of the following six groups in the Department of Mathematics and Science:

1. In Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and the differential and integral calculus.

2. In Astronomy: Elementary mathematics, including trigonometry and analytical geometry; general astronomy; general physics.

3. In Physics: Elements of mathematics, including trigonometry and analytical geometry; general physics.

4. In Chemistry: General chemistry; general physics.

5. In Geology and Physical Geography: Elements of geology, zoology and botany; general chemistry.

6. In Biology: Elements of zoology and botany; general chemistry.

II. *Chief Subject of Study.*—Every candidate, after passing his preliminary examination and before entering on his studies for the Doctor's degree, shall announce which one of the subjects in the appended lists he selects as his chief subject, and shall thereupon present to the Committee on the Graduate Department for their approval a statement of the said chief subject to which he intends devoting himself while a candidate, with such fulness of explanation as the committee may require.

A. Department of Philosophy: Logic, psychology, ethics, metaphysics, history of philosophy, philosophy of religion, history, political economy, science of politics, jurisprudence, archæology and art.

B. Department of Language and Literature: Sanskrit, Greek, Latin, French, German, Italian, English (including Anglo-Saxon).

C. Department of Mathematics and Science: Mathematics, astronomy, physics, chemistry, geology and physical geography, biology.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. One of these must be logic, psychology, ethics, or the history of philosophy, unless the candidate has chosen for his chief subject any one of those just named or else passes a satisfactory special examination on some one of them before entering upon his course

as a candidate. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken, as well as the following which are not thus enumerated: physiological psychology, pedagogics.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted, the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on the Graduate Department. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty, and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Philosophy carries with it that of Master of Arts.

VII. *Fees.*—Those who apply for the degree shall pay to the University Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Degree of Doctor of Science (D.Sc.) in Princeton University.

Subject to the regulations hereinafter stated, the degree of Doctor of Science may be conferred upon any Bachelor of Science

of Princeton University, or of any approved college or scientific school whose course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Science, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the Academic year of the University in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study and research.

They are also examined in the particular group of subjects connected with the subject of their proposed studies, as detailed below:

1. Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations and of the differential and integral calculus.

2. Astronomy: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general astronomy, general physics.

3. Physics: Elementary mathematics, including trigonometry, analytical geometry and the elements of the differential and integral calculus, general physics, general chemistry.

4. Chemistry: General chemistry, general physics.

5. Mineralogy: Elements (including crystallography), general chemistry, general physics.

6. Geology and Physical Geography: Elements of geology, zoology and botany, general chemistry.

7. Biology: Elements of zoology and botany, general chemistry.

II. *Chief Subject of Study.*—After passing the preliminary examination every candidate shall announce which of the following departments he selects for his chief subject of study:

1. Mathematics: Including higher differential and integral calculus; differential equations; geometry (conics, higher plane curves, geometry of three dimensions); theory of functions, elliptic functions, analytical mechanics. In the final examination the candidate will also be tested with reference to his ability to make a computation with reasonable skill and accuracy. This will be necessary only where the candidate has had no satisfactory laboratory or observatory work.

2. Astronomy: Including either practical astronomy and theory of observations, or computation of orbits and ephemerides.

3. Physics.

4. Chemistry. A portion of the time will be required for the study of qualitative and quantitative chemistry, unless the candidate is already sufficiently proficient in these branches.

5. Mineralogy.

6. Geology and Physical Geography: Including either practical and engineering geology, with field work, or application of palæontology to determinations of formations, or physical geography.

7. Biology: Including the morphology, histology and embryology of some one class of animals or plants; physiology; histological methods and practice; animal embryology; modes of reproduction of plants.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length, and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and if accepted it must be published by the candidate before the degree can be conferred. If the thesis is not accepted the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time

appointed by the Committee on the Graduate Department. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Science carries with it that of Master of Science.

VII. *Fees.*—Those who apply for the degree shall pay the University Treasurer a fee of forty dollars before entering the preliminary examination, twenty-five dollars each year thereafter, and fifty dollars when the thesis is handed in for examination.

Bachelor of Divinity. (B.D.)

This degree may be conferred upon a Bachelor of Arts of any approved college who shall also have completed a three years' course of theological study in any approved institution, followed by a two years' course of prescribed study in theology. This special course of study shall be prescribed, and all examinations required shall be conducted by examiners designated by the Board of Trustees.

The regulations as to preliminary examinations, chief and subsidiary subjects of study, thesis and final examination are similar to those pertaining to the doctorates, except that only one subsidiary subject is required. Residence in Princeton is not necessary for obtaining the degree.

The fees are the same as those paid by candidates for the Doctor's degree.

FELLOWSHIPS CONFERRED BY APPOINTMENT.

These fellowships were founded by subscription and endowment and were intended by the founders to encourage study and promote original research in the several departments to which they are assigned. They are distinguished from the competitive fellowships by being open to the graduates of any American college, while the appointments are made, not by competitive examination, but by a comparison of the records presented by the applicants as to their previous collegiate standing, capacity and character.

The Fellowships are subject to the following regulations:

1. The Fellowships are to be held for one year, but in cases of special merit they may be continued for a longer period, by recommendation of the department and sanction of the Faculty.

2. The candidates shall be graduates of not more than five years' standing of an accredited American college. An application should be accompanied with evidence of the qualifications of the applicant to pursue an independent course of study and investigation in the department concerned.

3. Appointment shall be made by the Faculty upon recommendation of the professors in the department interested, and shall be announced at Commencement.

4. All applications must be in the hands of the Registrar of the University on or before May 15th, the appointees to hold their positions for a year from the following September.

It is deemed essential to the development of the Graduate department that the number of these fellowships should be largely increased. The following have already been founded:

THE SOUTH EAST CLUB UNIVERSITY FELLOWSHIP IN SOCIAL SCIENCE.

This fellowship, which pays to the holder $500 per annum, was founded by alumni of the classes of '76, '77, '78 and '79—former residents of the South Entry of East College.

THE CLASS OF 1877 UNIVERSITY FELLOWSHIP IN BIOLOGY.

This fellowship pays to the holder $400 per annum.

THE UNIVERSITY FELLOWSHIP IN ENGLISH.

THE UNIVERSITY FELLOWSHIP IN ARCHÆOLOGY.

This fellowship pays to the holder $400 per annum.

THE THAW FELLOWSHIP IN ASTRONOMY.

This fellowship, which pays to the holder the income of $10,000, was founded by Mrs. Thaw of Pittsburgh.

COMPETITIVE FELLOWSHIPS, SCHOLARSHIPS AND PRIZES.

Besides the degrees and honors conferred in the regular course, annual fellowships, competitive scholarships and prizes are offered as special incentives to study, in the classes or departments with which they are connected.

Only matriculated students who are candidates for a degree are admitted to the competitition for these fellowships, prizes and scholarships, and no one is admitted to such competition who has failed to pass satisfactorily his last preceding examination in any of the departments.

No member of any class is allowed to compete for more than one of the fellowships or scholarships offered to that class.

The names of the fellows, scholars and prizemen of each year are included in the Honor List for the year.

The funds for the competitive fellowships, prizes and scholarships are special gifts, and the income is appropriated according to the specific instructions of the donor. They do not belong to the general funds of the University. If, therefore, there be default in the interest on the securities in which these funds are invested, the University assumes no pecuniary responsibility in the matter.

FELLOWSHIPS.

Every competitor must have been a member of the University in full standing for at least two academic years previous to the fellowship examinations.

No student whose final rank for scholarship is below the second general group can be a competitor for any fellowship; and no student can be a competitor for the fellowship in any particular department whose average rank for the last two years of his course is below the first group in that department.

Every Fellow obtaining one of the competitive fellowships the income of which is over $400 must devote his whole time for one year to study in the department for which the fellowship is provided, under the direction of the Professors in that department. He must reside in Princeton, and pass two rigid examinations on his work, unless by a vote of the Faculty he be allowed to study at an approved foreign university, in which case he shall from time to time furnish written reports of his work to the Professors in his department. The result of every examination and the reports of work done abroad shall be immediately reported to the Faculty. Any Fellow resident in Princeton shall, when called upon, perform such duties in the department to which he belongs as may be assigned to him by the President at the request of the Professors in that department. Any Fellow may be allowed to occupy free of cost in one of the University buildings a room assigned to him by the University authorities, and while occupying such room he shall be regarded as a resident officer of the University, and shall perform such duties in preserving order and decorum in the University edifices as the President and Dean may assign.

THE CHANCELLOR GREEN MENTAL SCIENCE FELLOWSHIP.

This fellowship, originally founded in 1870 upon the annual payment of $600 by the late Chancellor Henry W. Green, was permanently endowed in 1878 by a gift of $10,000 by his widow.

The income of this fund, at the current rate of interest, to be paid quarterly, will be awarded to that member of the Senior Class who shall write the best essay on a subject to be assigned by the department of philosophy (to be given in on or before June 1), and who shall stand highest at a special examination to be held in June.

The examination will include the philosophies of Plato, Aristotle, Descartes, Locke, Leibnitz, Hume, Reid and Kant; also theoretical ethics, metaphysics, psychology and inductive logic.

THE CLASSICAL FELLOWSHIP.

The classical fellowship has been, for a time, without funds. The sum of $600, payable quarterly, was previously awarded to the successful competitor. A portion of that sum will be awarded to

that member of the Senior Class who shall stand highest at a special examination to be held in June, on the following subjects:

IN GREEK.

Translation from English into Greek. Translation of prose Greek at sight. The *Alcestis* of Euripides, Aristophanes's *Frogs*, Plato's *Charmides* and *Lysis*. The philosophy of Plato.

IN LATIN.

Translation from English into Latin. Translation of Latin at sight. Cicero *de Finibus*, and the relations of Roman philosophy to Roman religion as specially exhibited in the works of Cicero and Lucretius. History of Latin literature.

THE CLASS OF 1860 EXPERIMENTAL SCIENCE FELLOWSHIP.

This fellowship was founded in 1870 upon the sum of $10,000 subscribed by the Class of 1860. A deficiency of income, resulting from the depreciation of the value of the securities in which the principal was invested and the lowering of the rate of interest, is paid, by the consent of the donor, from the income of the Magee Professorship of Mining and Engineering, founded by George J. Magee, Esq., of the Class of 1860.

The income of the fund, to be paid quarterly, will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects, viz: 1. Theory of heat. 2. Outlines of theoretical chemistry. 3. a. Geology of the Mesozoic Periods; b. the Mesozoic fishes, reptiles, and birds.

THE J. S. K. MATHEMATICAL FELLOWSHIP.

The J. S. K. Fellowship was founded in 1873 upon the sum of $11,000 given by a gentleman in New York City, three-fourths of the income of which is devoted to this fellowship, and one-fourth to the Freshman First Honor prize.

This fellowship will be awarded to that member of the Senior class who shall stand highest at a special examination, to be held in June, on the following subjects: Geometry; the calculus; differential equations; the elements of the theory of functions.

THE BOUDINOT FELLOWSHIPS.

These fellowships are founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey.

THE HISTORICAL FELLOWSHIP.—The sum of $200 per annum, to be paid quarterly, will be given to the holder of the Fellowship, who shall be appointed by the Faculty, upon the nomination of the President and the Professor or Professors of History, for any period not exceeding three years, on condition that he reside in Princeton and devote his whole time to historical research; that he deliver such lectures and conduct such exercises as the President and the Professor or Professors of History shall direct, and that he perform such other duties as may be assigned him in accordance with the general regulations respecting the duties of resident Fellows.

THE MODERN LANGUAGE FELLOWSHIP.—The sum of $200, to be paid quarterly, will be awarded to that member of the Senior class who shall pass the best examination in June, on the following subjects:

In German—Translation from English into German; the reading at sight of German prose, historical and literary; history of German literature; critical study of Lessing's Laocoon, Schiller's Jungfrau von Orleans, Goethe's Hermann und Dorothea and Faust. In French—Translation at sight of English into French; Brachet's Grammaire française; Demogeot's Histoire de la Littérature française; a critical knowledge of Molière's Tartuffe and Les Précieuses ridicules, Pascal's Pensées, premiére partie, Beaumarchais's Le Mariage de Figaro, Balzac's Eugénie Grandet. An essay of not less than four pages (foolscap) in either French or German.

The Fellow shall from time to time during the following year, as may be required by the Professors of Modern Languages, give evidence by papers that he is reading such a course as the Professors may approve.

THE E. M. BIOLOGICAL FELLOWSHIP.

The Biological fellowship will be awarded to that student who shall stand highest at a competitive examination on subjects assigned by the Professors of the Biological department.

The competition for this fellowship will be open to any member of the Senior class in either the Academic or Scientific department, or to any college graduate who shall have pursued during the pre-

ceding year, the university course in Biology at Princeton, and who shall, in the opinion of the examiners, be deemed competent to pursue the subject advantageously.

This fellowship conveys the use of a table in the National Seaside Laboratory at Woods Holl, Mass., together with all the facilities afforded for the collection and study of animal life during the season favorable for such investigations. In the winter months following this laboratory work the Fellow will pursue his studies at Princeton, and will be required to prepare and submit a thesis embodying the results of his summer researches.

The examinations for this fellowship in 1897 will be held in June upon the following subjects:

1. Life-history of higher cryptogams and gymnosperms.
2. Anatomy and embryology of mollusca.
3. Anatomy and embryology of the teleosts and selachians.
4. The histology of the nervous system.

PRIZES AND COMPETITIVE SCHOLARSHIPS.

ALEXANDER GUTHRIE M'COSH PRIZE.

The interest of $1,500 will be given annually to that member of the Senior class who shall pass the best examination and write the best essay in philosophy, including psychology, logic, metaphysics and the history of philosophy. The subject of the essay will be: Realism and Idealism. It must be handed in on or before June 1.

THE LYNDE PRIZES.

Three prizes—the income of $5,000, contributed by Charles R. Lynde, Esq.,—will be awarded by a committee appointed by the Faculty, to the three successful competitors in a debate on the Tuesday evening preceding Commencement. The competitors are six members of the Senior class—representatives of the Literary Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE BAIRD PRIZES.

Through the liberality of Charles O. Baird, Esq., the following prizes, representing the income of $6,000, will be given to

those who excel in the oratorical exercises of the Senior class, viz: The Baird prize of $100, to the best speaker of those who have ranked among the first six writers in any two of the three departments of English Literature, Rhetoric and Oratory; a prize for oratory, of $50, to the best speaker, exclusive of the Baird Prizeman, of those who, in the same departments, have ranked among the first twelve writers; a prize for delivery, of $30, to the best speaker exclusive of the two just mentioned; also, a prize for poetry of $50; and two prizes of $40 and $30, respectively, for the best and the second best written disputations.

THE CLASS OF 1859 PRIZE.

The interest of $2,000 given by the Class of 1859, will be awarded to that member of the Senior class who shall write the best essay on Mrs. Humphrey Ward as a Novelist and pass the best examination on Shakespeare's Twelfth Night. The essay must be handed in on or before June 1, and the examination will be held in June. The subject for the essay for the Class of 1898 will be Edmund Burke.

THE GEORGE POTTS BIBLE PRIZES.

The yearly interest of $1,000, given in 1867 by Mrs. Sarah A. Brown, expended in the purchase of two copies of Matthew Henry's Commentary on the Bible, will be presented to the two best Biblical scholars of the Senior class at the end of their course.

THE LYMAN H. ATWATER PRIZES IN POLITICAL SCIENCE.

This prize, being the annual interest on the sum of $1,000, contributed by the class of 1888, was instituted as a memorial of Rev. Lyman H. Atwater, D.D., LL.D., Professor of Political Science. It will be given to that member of the Senior class who shall be adjudged by the Professors of Political and Social Science to have passed the best examination and written the best essay. The subject for the examination in 1897 will be: The Referendum as used in Switzerland. The subject for the essay will be: Theories of Representation. The essay must be ready June 1, 1897; the examination will be held on that day.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

Mrs. Norman White has established in memory of her son, Frederick Barnard White of the Class of 1883, a prize in architecture, yielding $50 each year. It is open to the entire Junior and Senior classes and to Special students who take a full schedule of studies. It will be given for the best essay and examination. The subject of the essay for this year is: The Civic Buildings of the Middle Ages. The subject of the examination will be Mediæval European Architecture. The essay should be presented before June 1.

THE THEODORE CUYLER PRIZE IN ECONOMICS.

The interest of $1,000, presented by Mr. C. C. Cuyler, of the Class of 1879, will be given to that member of the Senior class who shall present the best thesis and pass the best examination in June on some subject in Political Economy, to be assigned by the Professor in charge of that Department. The subject for the thesis of 1897 will be: The Theory of Banking, and the examination will cover Conant's History of Banks of Issue.

CLASS OF 1869 PRIZE IN ETHICS.

The annual interest of $3,000, given by the Class of 1869, will be awarded to that member of the Senior class who shall pass the best examination in Ethics and write the best essay. The essay to be presented on or before June 1. The subject of the essay for the Class of 1897 will be: A criticism of the Ethics of Evolution.

THE C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

"The sum of one hundred and fifty dollars, payable in annual instalments of fifty dollars, will be awarded at intervals of not less than three years to that graduate of the University, pursuing the study of American history as a specialty, who shall have presented before graduation the best thesis on some topic assigned by the Professor of History, and connected with the political history of the United States between the years 1787 and 1820, and who shall annually, for two years thereafter, present as evidence of his work a satisfactory essay of not less than five thousand words on a kindred topic suggested by himself."

THE NEW YORK HERALD PRIZE.

The yearly interest of one thousand dollars, presented by Mr. James Gordon Bennett, will be given to the member of the Senior class or to the Special Student of satisfactory standing who shall have taken the prescribed course in Political Science and English Literature, and who shall have prepared the best essay in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States Government.

THE WOOD LEGACY.

The sum of $150, the income of a legacy of Dr. George B. Wood, will be awarded to that member of the Junior class who shall stand highest for the Junior year.

JUNIOR ORATOR MEDALS.

Four gold medals, or books of equal value, will be awarded by a committee appointed by the Board of Trustees, to the four successful competitors in an oratorical contest on the Monday evening before Commencement. The competitors are eight members of the Junior class—four from the Cliosophic and four from the American Whig Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

THE MACLEAN PRIZE.

The Maclean prize, founded by the will of the late Henry A. Stinnecke, consisting of the sum of $100, will be given to that one of the orators chosen by the Literary Societies from the Junior class, who shall on the Monday evening before Commencement pronounce the best English oration.

The committee of judges will be composed of the Professor of Rhetoric and two graduates of the University appointed by the Board of Trustees.

DICKINSON PRIZE.

The Dickinson prize, founded by John Dickinson, Esq., of New Jersey, in 1782, consisting of a medal of the value of $60 (or its equivalent in money), will be awarded to that member of the Junior class who shall write the best dissertation upon a theme in

Logic. The dissertation to be presented on or before June 1. The subject of the dissertation may be learned by applying to the Professor of Mental Science and Logic.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.

This prize is to be given annually by the class of 1876 to the successful contestant in a debate on a subject of current interest in American politics, to be held on Washington's Birthday, said prize to be the interest of $2,000. The competitors, four in number, one from each class, are to be chosen by a vote of the respective classes.

THE CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Of the yearly interest of $1,500, one-half will be given to the best Old English scholar, and one-half, to the best English Literature scholar of the Junior Academic Class.

THE THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Junior Academic Class who shall pass the best examination in English philology, and write the best thesis on some assigned topic therein.

THE STINNECKE SCHOLARSHIP.

The Stinnecke Foundation was established in 1870 by the will of the late Henry A. Stinnecke, of the Class of 1861, and was supplemented by a bequest received in 1876 from his aunt, Miss Maria Stinnecke. The income is divided between the Stinnecke scholarship of $500 and the Maclean prize of $100.

The Stinnecke scholarship, of the annual value of $500, tenable during the undergraduate course, unless forfeited by neglect of study, "will be given to that person who, having entered the Sophomore class, shall pass the best examination at the opening of the session in September, 1899, in the Odes of Horace, the Eclogues of Virgil, and the Latin Grammar and Prosody, as well as the Anabasis or Cyropædia of Xenophon and the Greek Grammar." Students of the University who have been members of the Freshman class, as

well as new students entering the Sophomore class, will be admitted to such examination. The committee of examiners is appointed by the Board of Trustees.

THE CLASS OF 1861 PRIZE.

The interest of $1,200, given by the Class of 1861, will be awarded to that member of the Sophomore class who shall pass the best examination at the end of the year on Mathematics 5, 6, 7, 8.

THE FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

This prize, the yearly interest of $500, will be given to that member of the Sophomore class, not below the fourth group in his English studies, who in the judgment of a committee appointed by the Faculty, shall write the best English essay of the year.

THE CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

This prize, the yearly interest of $1,000, will be given to that member of the Sophomore Academic class who, at the close of the Sophomore year, shall pass the best examination on the English studies of the year.

THE FRESHMAN FIRST HONOR PRIZE.

A prize of $200, part of the income of the J. S. K. Fund, to be paid in quarterly instalments during the following year, will be awarded to that member of the Freshman class who, having entered said class at the beginning of the Academic year, shall, at the end of the year, be reported to the Trustees by the Faculty as having attained the "highest average grade" in scholarship, provided he pursue his studies in this University and maintain a good standing during the Sophomore year. No student who has been suspended from the University, or who has been put upon his last probation, shall be eligible to this prize.

SOCIETIES.

Literary Societies.

The Cliosophic and American Whig Societies originated early in the history of the University. They are conducted by the undergraduates, but also include in their organization graduates and officers of the University. Both possess valuable libraries of over 10,000 volumes each. The old halls in which they were accustomed to meet, becoming too small for their accommodation, have been removed, and new and more commodious buildings have been erected near the old sites. They both pursue courses of literary exercises, award numerous prizes for orations, essays and debates, and grant diplomas to their respective graduates.

A generous competition for University honors has always prevailed between them. On the evening before Commencement representatives of the Societies from the Senior class engage in a public debate—on the preceding evening representatives from the Junior class engage in a competition in oratory. The details respecting the Lynde debate and Junior orations will be found on pp. 130, 133.

The Philadelphian Society.

The Philadelphian Society is an association of undergraduates for the promotion of the religious interests of the University, particularly of the members of the Society. It was founded in 1825. Devotional meetings are held on Thursday evenings, business meetings on Saturday evenings. Murray Hall, the building belonging to the Society, was erected from a bequest left for the purpose by Hamilton Murray of the class of 1872. It contains a hall for public worship and a reading room supplied with religious books and periodicals.

The St. Paul's Society.

The St. Paul's Society, which was founded in 1875, is an association similar in nature and aim to the Philadelphian, and is intended to be helpful, devotionally and practically, to those students in the University who have been accustomed to the worship of the Protestant Episcopal Church. It has weekly meetings, conducted by the students, and ordinarily a course of sermons is delivered annually in Trinity Church under its auspices. The weekly devotional meeting is held on Sunday evening at eight o'clock, and its business meetings on the third Wednesday of November, and the fourth Wednesday of April.

BUILDINGS, LABORATORIES, COLLECTIONS.

The University buildings are situated in an elevated and conspicuous portion of the campus, which consists of about two hundred and twenty-five acres. The oldest, and in many respects the most interesting of the buildings, is Nassau Hall, which dates back nearly to the foundation of the institution, having been erected in 1756. A portion of the west wing is still occupied by students, the remainder being devoted to the histological laboratory, the laboratory of experimental psychology and the offices of the Curator of the E. M. Museum and of instructors in the department of biology. The central and eastern portions contain the geological museums and lecture room, and the palæontological laboratory. The School of Science building, the Chancellor Green Library, Dickinson Hall, Murray Hall, and a number of other buildings, including the majority of the dormitories, have been erected since 1870. The Marquand Chapel, the gift of Henry G. Marquand, Esq., of New York, was built in 1882. The Academic lectures and recitations are conducted mainly in Dickinson Hall and in the east end of Nassau Hall, while the Scientific lecture rooms and laboratories are principally in the building of the John C. Green School of Science and in the Biological laboratory presented by the class of 1877. The Museum of Historic Art, the central part of which has been completed, will contain the lecture rooms for the courses in Art and Archæology. The special instruction in the department of Electrical Engineering is carried on mainly in the Magnetic Observatory, and the Chemical Laboratory provides the class rooms and laboratories of the departments of Chemistry and Mineralogy. Two dormitories, the Albert B. Dod Hall, and the David Brown Hall, both gifts of Mrs. David Brown, of Princeton, have been recently erected. Other buildings are the Dynamo building of the School of Electrical Engineering and the Halls

of the American Whig and the Cliosophic Literary Societies. Alexander Hall is a handsome building lately finished, the generous gift of Mrs. Charles B. Alexander, to be used for Commencement exercises and all academic gatherings. The Isabella McCosh Infirmary has been completed and is now open. The Brokaw Memorial Building has been constructed in connection with the Brokaw Field. This building is the gift of Mr. I. V. Brokaw, in memory of his son, Frederick Brokaw. A building to be used for indoor tennis, and for occasional entertainments, has been erected by contributions from the undergraduates and their friends. A large and complete library building, and a new dormitory, to be called Blair Hall, in honor of its donor, Hon. John I. Blair, are now being erected. The students—except by special permission of the Faculty—reside in the College dormitories, the west wing of Nassau Hall, East College, West College, Reunion Hall, Witherspoon Hall, Edwards Hall, University Hall, Albert B. Dod Hall, and David Brown Hall.

LIBRARIES.

The Chancellor Green Library.

Organization: Ernest C. Richardson, Librarian; Miss C. Martins, Chief of Ordering Department; V. Lansing Collins, Reference Librarian; Miss C. D. Joline, Chief Cataloguer; Miss S. A. Vinton, Periodicals; R. H. Peabody, Accessions; Miss E. G. Hyde, Miss Mershon, Mr. Cottrell, Miss McTear.

The library began with the University itself, in a bequest of books by Governor Belcher. The first catalogue, printed in 1760, shows that it then consisted of more than twelve hundred volumes. It suffered much during the Revolution, and it was burnt, with Nassau Hall, in 1802. The gifts of many liberal friends soon re-established it, and it slowly advanced to 9,313 volumes in 1854. The want of resources for its increase kept it small, until the Elizabeth fund of $50,000 was created by Mr. John C. Green in 1868. When the present library building was erected by him, in 1872–73, the collection contained about 25,000 volumes. The library at present contains 102,307 volumes, and perhaps 25,000 unbound periodicals and pamphlets. It is broadly divided into the Main Library, the Alumni collection, the Civil War collection,

the Princeton University collection or "Archives," the Kept books, and the Periodical collection. It is probably strongest in the departments of mathematical, physical, natural and mental science, but it is rich, also, in philology and literature, especially in works on the origin and early history of the English language and in early editions of the classics. Generous efforts have been made to enrich it with the serial issues of scientific associations abroad.

The library building contains a large central room with alcoves, a large room to the west used for the meetings of Trustees, but at other times serving as a general Reading Room, three small rooms at the east end used chiefly for administrative purposes, and basement. The bulk of the main library is in the large room, and the remainder—about 15,000 of the less used volumes—in the basement. The current Periodicals are kept on file in the West room. A new building, planned to hold 1,250,000 volumes, is in process of erection.

The Library hours are, during term time, from 8 A. M. until dark; in vacation from 9 A. M. until 1 P. M.

Books may be drawn by all officers and students of the University and Theological Seminary, and by others having special permission. The number of books which may be taken is limited to three in the case of students, with the exception of Seniors, who may take five. Officers, Fellows and Graduate students may take any reasonable number. The length of time during which books may be kept is two weeks. Fellows and Graduate students may retain for four weeks, and Officers for any reasonable time. All books may be renewed when due, unless they have been asked for by some one else. Reference books (including books temporarily withdrawn from general circulation for debates, essays, or similar purposes) may be taken over night, *i. e.*, between 4 P. M. and 8:30 A. M.

The catalogues consist of a printed subject catalogue, extending to 1884, a written author card-catalogue, a card-catalogue of subjects, and a special printed catalogue of the Class of '88 library. These are found on the catalogue desks, on the southeast side of the main room.

The Hall Libraries.

The two Literary Societies—Whig and Cliosophic—have catalogued libraries of 10,000 volumes or more each, and the religious society, the Philadelphian, one of 800 volumes.

The Theological Seminary Library.

The library of the Princeton Theological Seminary, which contains 58,000 volumes, is open to the students of the University for consultation and loan of books on Monday from 12 M. to 1 P. M. and from 2 P. M. to 4 P. M.; on Tuesday, Wednesday, Thursday and Friday from 10 A. M. to 1 P. M. and from 2 to 4 P. M., and on Saturday from 10 A. M. to 1 P. M.

SUMMARY OF LIBRARIES.

The Chancellor Green Library,	102,307
Hall Libraries,	21,000
Seminary Library,	58,000
Total (exclusive of pamphlets and duplicates),	181,307

MUSEUMS.

The E. M. Museum of Geology and Archæology.

This Museum, occupying the central and eastern wings of Nassau Hall, contains collections which are distributed in the three general departments of Geology (including Mineralogy), Palæontology and Archæology. Their arrangement is especially adapted to the purposes of comparative study.

In the GEOLOGICAL DEPARTMENT a special room contains a unique collection of over 5,000 specimens of erratic boulders and drift materials from Switzerland. There is also a special room devoted to the typical rocks and fossils of the State of New Jersey. A collection of the typical rocks of the State of New York represents the series as described in the Geological Survey of that State.

There is in this department a large collection of minerals, chiefly crystals, containing about 2,600 specimens, bequeathed to the University by the late Archibald MacMartin, of New York. The perfection of the specimens, and the number of localities represented in each family, make this collection one of special value.

PALÆONTOLOGICAL DEPARTMENT.—The upper or eastern hall contains the main collection; on the platform are the skeletons of a Mastodon, an Irish Deer, a Cave Bear, and some of the extinct birds of New Zealand; also the skulls of Uintatherium and a re-

markably complete skeleton of Cervalces. There are mounted casts of the gigantic reptiles and mammals of the secondary, tertiary and quaternary ages. Surrounding the room is a very perfect collection of vertebrate and invertebrate fossils from Europe and America, illustrating the principal organic forms of all the geological epochs. The typical fossils selected agree, as far as possible, with those mentioned in Dana's Geology, as characteristic of different geological periods. Included in this series are the fine eocene and miocene fossils, many of which are type specimens, procured in the West by the various Princeton collecting parties. There is also a series of fossil insects and plants from Colorado, most of which are also types. Altogether the number of fossils, not counting duplicates, is 15,000.

ARCHÆOLOGICAL DEPARTMENT.—Here are relics of the Swiss lake dwellings, and numerous implements of stone and bronze from Denmark; also several hundred flint instruments from most of the classical localities of the palæolithic and neolithic ages of France.

America is represented by the pottery and human remains of the mound builders, by several hundred specimens of Mexican and Peruvian pottery, and by a number of recent Indian relics. The interesting ethnological collection of objects, chiefly from Alaska and New Mexico, which Dr. Sheldon Jackson presented to the Theological Seminary of Princeton, has been transferred to this Museum by the Trustees of that institution, with the consent of the donor. There is also a series of models of the cliff-dwellings and Pueblos of the Southwest, executed under the direction of Dr. Hayden.

Below the eastern hall are the lecture and working rooms.

Museum of Biology.

The biological collections have been chiefly made from the endowment fund of the John C. Green School of Science. There have also been many smaller donations to the Museum from time to time. The collections are placed in the large upper hall of the School of Science building, and are at present especially rich in osteological specimens. On the same floor are the laboratory and working rooms of the Curator of the Museum. The collection of vertebrates includes a large number of mounted and disarticulated skeletons of mammals, reptiles, birds and fishes, a series of the birds

of New Jersey and of other districts of North America, carefully mounted, and alcoholic specimens. A feature of the ornithological collection is the very large number of unmounted bird skins, arranged for the purpose of comparative study of the plumage, beak and feet. Among the invertebrates are a series of ascidians, echinoderms, molluscs, crustaceans, insects, worms, corals, sponges, and microscopic preparations of small forms. Students may apply to the Curator for access to the catalogue and cases containing the skeletons. During the past year the Museum has received, among other gifts, a number of butterflies from Mr. R. Weber, collected by him in Java and Sumatra; from Professor Marquand some birdskins from Yucatan; through Professor Scott a collection of echinoderms from the Mediterranean, and of lizards and amphibia from Southern Europe.

The Herbarium is on the second floor of the School of Science building, and is arranged as a museum of the botanical collections, also as a working laboratory for students. The plants are classified according to Bentham and Hooker's *Genera Plantarum*, and include specimens from the different sections of the United States, and from South America, Europe and Australia. There are extra specimens for laboratory use and dissecting, together with compound microscopes, reagents, anatomical instruments, section cutters, models, diagrams and books of reference; and the reference library of the late Professor Leo Lesquereux, presented to the University by Mr. P. W. Huntington of Columbus, Ohio.

The Museum of Historic Art.

The upper story of the new museum has been sufficiently finished to serve the purpose of exhibition. Mrs. T. Harrison Garrett has kindly arranged for a series of exhibitions of her fine collection of prints. About eight hundred engravings have been put on exhibition in 418 frames.

The present exhibition is remarkable for early states and choice impressions of well-known masterpieces, selected for the purpose of giving as complete an impression as possible of the varied range of artistic qualities and technical execution in the various processes and by all schools from the fifteenth century to the present. One room is devoted especially to a fine series of representations of the Holy family; the most conspicuous being four plates of Raphael's

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In the Graphics room of the School of Science may be found the Brill plaster models of higher algebraic surfaces; a set of duplicates of the more important Olivier models of ruled surfaces; the Björling developable surface models, a number of the Muret set and the Schröder mathematical models.

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In the second floor are two large lecture rooms, a room for experiments in chemical physics, two cabinets for specimens and lecture apparatus, a mineral cabinet, a laboratory for advanced students and the professor's private laboratory.

In the basement are various rooms for gasometric work, and for experiments in technical and organic chemistry, which cannot conveniently be undertaken in the laboratories for general students, assay laboratory, work-shop, cloak room, janitor's room, store-rooms and battery.

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For advanced students engaged in original investigations, there are private rooms available.

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The laboratory is used in connection with the instruction in Experimental Mechanics and the Planning and Construction of

Engineering Works, and contains a torsional testing machine; a wire and cement tester; various kinds of current meters and water gauges; a Worthington water meter; a contrivance for determining the hydraulic slopes within earthen retaining banks; a flushing tank; a reaction wheel and other minor pieces of hydraulic apparatus; a double acting steam pump; a locomotive link and valve motion; a ten horse-power compound engine with condenser, indicators, gauges and a Prony brake; and a 25-foot iron working model of a single track railroad bridge, with a complete outfit of false-works and other appliances for its erection, designed especially for this institution.

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ASTRONOMICAL OBSERVATORIES.

The Halsted Observatory.

This is appropriated to scientific work, chiefly in the department of astronomical physics. The building is of stone, with an iron dome thirty-nine feet in diameter, the power for moving it and its sliding shutter being furnished by an electric motor and storage battery. The principal instrument is the great equatorial, of twenty-three inches aperture and thirty feet focal length, made by the Clarks. It is provided with all the usual accessories, micro-

the Princeton University collection or "Archives," the Kept books, and the Periodical collection. It is probably strongest in the departments of mathematical, physical, natural and mental science, but it is rich, also, in philology and literature, especially in works on the origin and early history of the English language and in early editions of the classics. Generous efforts have been made to enrich it with the serial issues of scientific associations abroad.

The library building contains a large central room with alcoves, a large room to the west used for the meetings of Trustees, but at other times serving as a general Reading Room, three small rooms at the east end used chiefly for administrative purposes, and basement. The bulk of the main library is in the large room, and the remainder—about 15,000 of the less used volumes—in the basement. The current Periodicals are kept on file in the West room. A new building, planned to hold 1,250,000 volumes, is in process of erection.

The Library hours are, during term time, from 8 A. M. until dark; in vacation from 9 A. M. until 1 P. M.

Books may be drawn by all officers and students of the University and Theological Seminary, and by others having special permission. The number of books which may be taken is limited to three in the case of students, with the exception of Seniors, who may take five. Officers, Fellows and Graduate students may take any reasonable number. The length of time during which books may be kept is two weeks. Fellows and Graduate students may retain for four weeks, and Officers for any reasonable time. All books may be renewed when due, unless they have been asked for by some one else. Reference books (including books temporarily withdrawn from general circulation for debates, essays, or similar purposes) may be taken over night, *i. e.*, between 4 P. M. and 8:30 A. M.

The catalogues consist of a printed subject catalogue, extending to 1884, a written author card-catalogue, a card-catalogue of subjects, and a special printed catalogue of the Class of '88 library. These are found on the catalogue desks, on the southeast side of the main room.

The Hall Libraries.

The two Literary Societies—Whig and Cliosophic—have catalogued libraries of 10,000 volumes or more each, and the religious society, the Philadelphian, one of 800 volumes.

The Theological Seminary Library.

The library of the Princeton Theological Seminary, which contains 58,000 volumes, is open to the students of the University for consultation and loan of books on Monday from 12 M. to 1 P. M. and from 2 P. M. to 4 P. M.; on Tuesday, Wednesday, Thursday and Friday from 10 A. M. to 1 P. M. and from 2 to 4 P. M., and on Saturday from 10 A. M. to 1 P. M.

SUMMARY OF LIBRARIES.

The Chancellor Green Library,	102,807
Hall Libraries,	21,000
Seminary Library,	58,000
Total (exclusive of pamphlets and duplicates),	181,807

MUSEUMS.

The E. M. Museum of Geology and Archæology.

This Museum, occupying the central and eastern wings of Nassau Hall, contains collections which are distributed in the three general departments of Geology (including Mineralogy), Palæontology and Archæology. Their arrangement is especially adapted to the purposes of comparative study.

In the GEOLOGICAL DEPARTMENT a special room contains a unique collection of over 5,000 specimens of erratic boulders and drift materials from Switzerland. There is also a special room devoted to the typical rocks and fossils of the State of New Jersey. A collection of the typical rocks of the State of New York represents the series as described in the Geological Survey of that State.

There is in this department a large collection of minerals, chiefly crystals, containing about 2,600 specimens, bequeathed to the University by the late Archibald MacMartin, of New York. The perfection of the specimens, and the number of localities represented in each family, make this collection one of special value.

PALÆONTOLOGICAL DEPARTMENT.—The upper or eastern hall contains the main collection; on the platform are the skeletons of a Mastodon, an Irish Deer, a Cave Bear, and some of the extinct birds of New Zealand; also the skulls of Uintatherium and a re-

markably complete skeleton of Cervalces. There are mounted casts of the gigantic reptiles and mammals of the secondary, tertiary and quaternary ages. Surrounding the room is a very perfect collection of vertebrate and invertebrate fossils from Europe and America, illustrating the principal organic forms of all the geological epochs. The typical fossils selected agree, as far as possible, with those mentioned in Dana's Geology, as characteristic of different geological periods. Included in this series are the fine eocene and miocene fossils, many of which are type specimens, procured in the West by the various Princeton collecting parties. There is also a series of fossil insects and plants from Colorado, most of which are also types. Altogether the number of fossils, not counting duplicates, is 15,000.

ARCHÆOLOGICAL DEPARTMENT.—Here are relics of the Swiss lake dwellings, and numerous implements of stone and bronze from Denmark; also several hundred flint instruments from most of the classical localities of the palæolithic and neolithic ages of France.

America is represented by the pottery and human remains of the mound builders, by several hundred specimens of Mexican and Peruvian pottery, and by a number of recent Indian relics. The interesting ethnological collection of objects, chiefly from Alaska and New Mexico, which Dr. Sheldon Jackson presented to the Theological Seminary of Princeton, has been transferred to this Museum by the Trustees of that institution, with the consent of the donor. There is also a series of models of the cliff-dwellings and Pueblos of the Southwest, executed under the direction of Dr. Hayden.

Below the eastern hall are the lecture and working rooms.

Museum of Biology.

The biological collections have been chiefly made from the endowment fund of the John C. Green School of Science. There have also been many smaller donations to the Museum from time to time. The collections are placed in the large upper hall of the School of Science building, and are at present especially rich in osteological specimens. On the same floor are the laboratory and working rooms of the Curator of the Museum. The collection of vertebrates includes a large number of mounted and disarticulated skeletons of mammals, reptiles, birds and fishes, a series of the birds

of New Jersey and of other districts of North America, carefully mounted, and alcoholic specimens. A feature of the ornithological collection is the very large number of unmounted bird skins, arranged for the purpose of comparative study of the plumage, beak and feet. Among the invertebrates are a series of ascidians, echinoderms, molluscs, crustaceans, insects, worms, corals, sponges, and microscopic preparations of small forms. Students may apply to the Curator for access to the catalogue and cases containing the skeletons. During the past year the Museum has received, among other gifts, a number of butterflies from Mr. R. Weber, collected by him in Java and Sumatra; from Professor Marquand some birdskins from Yucatan; through Professor Scott a collection of echinoderms from the Mediterranean, and of lizards and amphibia from Southern Europe.

The Herbarium is on the second floor of the School of Science building, and is arranged as a museum of the botanical collections, also as a working laboratory for students. The plants are classified according to Bentham and Hooker's *Genera Plantarum*, and include specimens from the different sections of the United States, and from South America, Europe and Australia. There are extra specimens for laboratory use and dissecting, together with compound microscopes, reagents, anatomical instruments, section cutters, models, diagrams and books of reference; and the reference library of the late Professor Leo Lesquereux, presented to the University by Mr. P. W. Huntington of Columbus, Ohio.

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metric and spectroscopic. The building also contains a clock and a chronograph, and is in electric connection with the Observatory of Instruction.

The Observatory of Instruction.

This establishment is devoted entirely to the use of students, and is fully equipped for its purpose. It possesses an equatorial (by Clark) of 9½ inches aperture, with a full complement of spectroscopic and other accessories. It has also a 9-inch reflector; a meridian circle with circles 2 feet in diameter and a 4-inch telescope; two transit instruments with 3-inch telescopes, both of them arranged for use as zenith telescopes; a 3-inch prime-vertical instrument; a chronograph; two standard clocks, and two chronometers. There are also a number of sextants, and all the other subsidiary apparatus required for carrying out the work involved in the courses on Practical Astronomy. See Astronomy 5, 6.

THE ISABELLA M'COSH INFIRMARY.

The Infirmary was planned by Surgeon-General Billings, and contains all the modern arrangements of the best hospital construction. The building is pleasantly located on Washington street, commanding every advantage of position as to air, outlook and sewerage. While the health of Princeton is exceptionally good, the occasional illness incident to so large a body of students demanded accommodation suitable for its care. This has been secured in the Infirmary by the liberality of friends of the University.

It is open to the reception of students on certificate of attending physician. The Sanitary Committee of the University has the institution under its care and has placed in charge a matron and trained nurse. Board and laundry bills are one dollar a day. The expense of nursing varies with the severity of the case.

ALEXANDER HALL.

This handsome and substantial building is the generous gift of Mrs. Charles B. Alexander. It is used for Commencement and Class Day exercises, public lectures, and other university gather-

ings of a general character. The auditorium is arranged with sloping floor and high gallery, so that an audience of fifteen hundred may be comparatively near the speaker. The rostrum and President's chair are finished in colored marbles and polychromatic mosaic. Behind the rostrum is a row of mosaic wall pictures designed by J. A. Holzer, illustrative of the Homeric story. A large organ built by George Jardine and Son, and embodying the most recent features of organ construction, stands in one of the small galleries near the rostrum.

The building is constructed of granite and brown stone in the Romanesque style of western France. The front toward the south exhibits a large rose window beneath a gable roof, and between the central structure and two side towers are two fine round-arched openings which lead into a wide ambulatory encircling the building. From this ambulatory the rostrum and auditorium are reached. The two side towers and two smaller ones at the rear enclose staircases, which lead to the auditorium gallery. The building, which was designed by William A. Potter, has been decorated with sculpture under the direction of the architect, by J. Massey Rhind. Beneath the rose window is a seated figure of Learning, on one side of which are allegorical figures of Architecture, Sculpture, Painting, Poetry, Music, and Belles Lettres, on the other are Oratory, Theology, Law, History, Philosophy, and Ethics. There are other sculptures about the rose window and in the niches around the ambulatory.

GYMNASIUM.

The gymnasium was built in 1869 by Mr. Robert Bonner and Mr. Henry G. Marquand. It contains, besides the main hall with the apparatus for physical training, hot and cold shower and plunge baths, dressing rooms, bowling alleys, and a gallery for visitors. The gymnasium is open daily from 10 A. M. to 7 P. M. throughout the year. The director is in attendance during these hours to examine, advise, and instruct all who may desire his services.

THE UNIVERSITY ATHLETIC GROUNDS.

This field is a spacious one, complete in its appointments and less than a quarter of a mile from the campus. There is room on the turfed portion for two games simultaneously of either baseball or football. The cinder track is about half a mile long, with carefully calculated curves. Within the enclosure are: 1. A large winter practice house, built of brick, with a clear floor space of 60 by 140 feet; 2. A club house containing the necessary dressing rooms; 3. A large and handsome grand stand, the gift of Mrs. J. J. McCook of New York, which has a seating capacity of 750 and a tower clock in one of its gables. On the field is likewise the Osborn club house, the gift of Professor Henry Fairfield Osborn, of the class of '77, in which are the necessary bath rooms, training tables, etc., for the use of the athletic teams.

GENERAL ORDERS.

TERMS AND VACATIONS.

The year is divided into two terms of eighteen weeks each.

The first term of the present Academic year (1896–97) began on Wednesday, the 23d of September, 1896, and ends on Wednesday, the 10th of February, 1897. The second term begins on Thursday, the 11th of February, 1897, and ends on Wednesday, the 16th of June, 1897, the day of the Annual Commencement.

Students are not allowed to leave the University during term-time without express permission obtained from the Faculty or from the officer of the class to which they belong.

REGULATIONS CONCERNING REGISTRATION.

At the beginning of the Academic year each undergraduate student shall report in person at the Registrar's Office, before 1 P. M. of the first Thursday of the term, and register

a. his full name, home address and Princeton address—

b. his choice of electives for the term.

Entering students shall register when they matriculate.

After the Thanksgiving recess, the Christmas vacation, and the Easter recess, the student shall report in person at the Registrar's Office, before 5 P. M. of the day on which exercises are resumed, and register his name.

The choice of electives for the second term must be reported in writing to the Registrar, on or before the third Monday in January.

The student who does not register in accordance with the above rules will not be allowed to register until he has received special permission from his class officer.

In every case of delay in registration *three* absences will be recorded against the student for each day that the registration is de-

layed. Serious cases shall be punished by postponement of the registration with corresponding increase in the absences recorded, by putting the student on probation, by suspension, or otherwise as the Faculty may determine. The penalty for delay in reporting the full list of electives for the term shall be the record of one absence each day for each elective not reported, until the list is complete; this delay to be reckoned from the registration at the beginning of the Academic year or from the third Monday in January. Serious cases shall be punished more severely as the Faculty may determine. If the student enter any elective class after exercises with that class have been held, he shall be reported by the instructor as absent from those exercises.

COMMENCEMENT EXERCISES.

THE ANNUAL COMMENCEMENT takes place on the Wednesday preceding the last Wednesday but one in June.

THE BACCALAUREATE SERMON of the President to the graduating class is delivered in the Marquand Chapel on the Sunday preceding Commencement.

The Class Day exercises of the graduating class, and the Junior oratorical contest are held on Monday preceding Commencement. The reading of theses by the graduating class of the School of Science, the annual meetings of the Literary Societies, the annual meeting of the Alumni Association of Nassau Hall, and the Lynde prize debate are held on Tuesday.

PUBLIC WORSHIP.

Prayers are offered in the Marquand chapel every week-day morning.

Divine service, under the superintendence of the President, is held in the Marquand chapel, on Sunday, at 11 o'clock A. M.

A brief religious service is held in the chapel every Sunday afternoon at 5 o'clock.

Permission to attend divine service elsewhere than in the chapel, on special occasions, is granted on application to the President. For permission to attend regularly one of the churches of the town on Sunday morning, a written request from the parent or guardian of the applicant must be presented to the President.

PUBLIC LECTURES.

The interest of $10,000, presented by Mr. Spencer Trask of New York City, is available to secure the services of eminent lecturers to deliver public lectures before the University on subjects of special interest.

ATTENDANCE.

The several classes ordinarily attend three recitations or lectures every day, except Wednesday and Saturday, upon which days there are no exercises in the afternoon.

Every undergraduate student is required to attend all the chapel services, to be present during the lectures and recitations of his class, and is expected to avail himself of the privileges of the library and gymnasium upon the conditions and at the hours appointed.

When the student's absences, either from chapel or from class exercises, exceed certain fixed limits, he becomes liable to discipline according to the published rules of the Faculty.

CHARITABLE FUNDS.

THE RICHARDS FUND.—A bequest by Mrs. Esther Richards, of New York, amounting to $2,970.32, for the benefit of candidates for the ministry. Received in 1790.

THE LESLIE FUND.—A bequest of James Leslie, of New York, a graduate of the class of 1759, amounting to $10,677.49, for "the education of poor and pious youth with a view to the ministry of the Gospel in the Presbyterian Church." Received in 1792.

THE HODGE FUND.—A bequest of Hugh Hodge, of Philadelphia, of a house and lot on Market street, above Second (No. 205), "to be held by the Trustees in trust, to lease out from time to time, and the rents to be applied to the support and education of pious youth for the ministry." Received in 1805. The net income for the current year will amount to about $750.

THE VANARSDALE FUND.—A bequest of Robert VanArsdale, of Newark, N. J., of the class of 1826, amounting to $3,000, "in trust for promoting charitable instruction in the College of New Jersey, according to the discretion of the Faculty." Received in 1875.

ENDOWED SCHOLARSHIPS.

1–3.	The COLT Scholarships, founded by Roswell Colt, of Paterson, N. J.,	$3000
4.	The NEWKIRK Scholarship, founded by Matthew Newkirk, of Philadelphia,	1000
5.	The JOHN JOSEPH RANKIN Memorial Scholarship, founded by his father, Wm. Rankin, of Newark, N. J.,	1000
6.	The CRESSWELL Scholarship, founded by A. Cresswell of Kishacoquillas, Pa.,	1000
7.	The ISAAC R. RANKIN Scholarship, founded by Isaac R. Rankin, of Newark, N. J.,	1000
8.	The MUSGRAVE Scholarship, founded by Rev. George W. Musgrave, D.D.,	1000
9.	The COGSWELL Scholarship, founded by Rev. Jonathan Cogswell, D.D.,	1000
10.	The GREEN Scholarship, founded by Hon. Henry W. Green, LL.D.,	1000
11–15.	The LENOX Scholarships, founded by James Lenox, of New York,	5000
16.	The HODGE Scholarship, founded by Dr. Hugh L. Hodge, of Philadelphia,	1000
17.	The A. B. BAYLIS Scholarship, founded by A. B. Baylis, of Brooklyn,	1000
18.	The HENRY J. VAN DYKE Scholarship, founded by George L. Sampson, of Brooklyn,	1000
19.	The GREGORY Scholarship, founded by Dudley S. Gregory, of Jersey City,	1000
20.	The FIRST PRESBYTERIAN CHURCH OF PEEKSKILL Scholarship, founded by members of the Church,	1000
21.	The VAN VORST Scholarship, founded by Hon. John Van Vorst, of Jersey City,	1000
22.	The JANEWAY Scholarship, founded by the Rev. Jacob J. Janeway, D.D.,	1000
23.	The PRESBYTERIAN CHURCH OF HUNTINGTON, L. I., Scholarship, founded by the ladies of the Church,	1000
24.	The BACKUS Scholarship, founded by E. F. Backus, of Philadelphia,	1000
25.	The VAN SINDEREN Memorial Scholarship, founded by Mrs. and Miss Van Sinderen, of Brooklyn,	1000
26.	The NORRIS HALSTED Scholarship, founded by Gen. N. Norris Halsted, of Newark, N. J.,	1000
27.	The MACLEAN Scholarship, founded by Drs. John and George M. Maclean,	1000
28.	The HAINES Scholarship, founded by Richard T. Haines, of Elizabeth, N. J.,	1000
29.	The JACKSON Scholarship, founded by Hon. John P. Jackson, of Newark, N. J.,	1000

80. The TUTTLE Scholarship,
founded by Joseph N. Tuttle, of Newark, N. J., 1000
81. The GERTRUDE N. WOODHULL Memorial Scholarship,
founded by her son, Dr. John N. Woodhull, of Princeton, 1000
82. The NATHANIEL W. TOWNSEND Memorial Scholarship,
founded by his daughter, Mrs. Daniel Haines, 1000
83. The FIRST PRESBYTERIAN CHURCH OF BRIDGETON
Scholarship, founded by members of the Church, 1000
84. The SKIDMORE Scholarship,
founded by Joseph R. Skidmore, of New York, 1000
85. The SPENCER Scholarship,
founded by I. S. Spencer, 1000
86. The JEREMIAH D. LALOR Memorial Scholarship,
founded by a friend, 1000
87. The MARQUAND Scholarship,
founded by Frederick Marquand, of Southport, Conn., 1000
88. The FIRST PRESBYTERIAN CHURCH OF TRENTON
Scholarship, founded by members of the Church, 1000
89. The CAMERON Scholarship,
founded by Hons. Simon and Donald Cameron, 1000
90. The SECOND PRESBYTERIAN CHURCH OF ELIZABETH
Scholarship, founded by members of the Church, 1000
91. The C. S. BAYLIS Scholarship,
founded by Charles S. Baylis, of Brooklyn, 1000
92. The ELIZA MUSGRAVE GIGER Memorial Scholarship,
founded by her son, Prof. George M. Giger, D.D., 1000
93. The BLAIR Scholarship,
founded by James Blair, of Scranton, Pa., 1000
94. The PENNINGTON Scholarship,
founded by Dr. Samuel H. Pennington, of Newark, N. J., 1000
95. The FENTON Scholarship,
founded by Aaron Fenton, 1000
96. The TRASK Scholarship,
founded by Alanson Trask, of Brooklyn, 1000
97. The WITHINGTON Scholarship,
founded by Chandler Withington, of Kingston, N. J., 1000
98. The NEWARK Scholarship,
founded by the will of Henry Rogers, of Newark, N. J., 1000
99. The CARTER Scholarship,
founded by Aaron Carter, of Newark, N. J., 1000
100-104. The HOLMES Scholarships,
founded by Capt. Silas Holmes, of New York, 5000
105. The COLWELL Scholarship,
founded by Stephen Colwell, of Philadelphia, 1000
106. The AITKIN Scholarship,
founded by John Aitken, of New York, 1000
107. The BULLARD Scholarship,
founded by Mrs. P. Bullard, 1000

58. The CHARLES DICKINSON HAMILL Memorial Scholarship, founded by his father, the Rev. Samuel M. Hamill, D.D., 1000
59. The CYRENIUS BEERS Memorial Scholarship, founded by his daughter, Miss Julia Beers, 1000
60. The JACOBUS Scholarship, founded by Peter Jacobus, of Newark, N. J., 1000
61. The MATTHEW B. HOPE Scholarship, founded by the Trustees as an acknowledgment of the services of Prof. Hope in raising an endowment of over $100,000, 1000
62. The JOHN MACLEAN Scholarship, founded by a friend of President Maclean, 1000
63. The WHITE Scholarship, founded by William White, Esq., 1000
64. The ELIZABETH VAN CLEVE Scholarship, founded by the Hon. C. S. Green, of Trenton, N. J., 2000
65. The BLOOMFIELD Scholarship, founded by the Hon. Amzi Dodd, of Bloomfield, N. J., 1000
66. The FLAGLER Scholarship Fund, the gift of Henry M. Flagler, of New York City, 1500
67. The JAMES MCCOSH Scholarship, founded by friends of President McCosh in N. Y. City, 1000
68–69. The WISTAR MORRIS WOOD and CHARLES MORRIS WOOD Scholarships, founded by their father, the Rev. Charles Wood, D.D., of Germantown, Pa., 2000
70. The CLASS OF 1856 Scholarship, founded by members of the Class of 1856, 1000
71. The CLASS OF 1841 Scholarship, founded by members of the Class of 1841, 1000
72. The ALBERT DOD BROWN Memorial Scholarship, founded by his mother, Mrs. Susan D. Brown, of Princeton, N. J., 1000
73–82. The JONATHAN DICKINSON Scholarship,
The AARON BURR Scholarship,
The JONATHAN EDWARDS Scholarship,
The SAMUEL DAVIES Scholarship,
The SAMUEL FINLEY Scholarship,
The JOHN WITHERSPOON Scholarship,
The SAMUEL STANHOPE SMITH Scholarship,
The ASHBEL GREEN Scholarship,
The JAMES CARNAHAN Scholarship,
The FRANCIS L. PATTON Scholarship,
83–87. The KENNEDY Scholarships, founded by Miss Rachel L. Kennedy, of New York, 15,000
88. The A. O. HEADLEY Scholarship, founded by A. O. Headley, Esq., of Newark, N. J., 1000
89. The HARVEY LINDSLEY Memorial Scholarship, founded by Mrs. Emeline Coney Lindsley, 1000

90. The BUTLER Scholarship, founded by William Allen Butler, Jr., Esq., 1000
91. The BROKAW Scholarship, founded by Isaac V. Brokaw, Esq., of New York, 1000
92. The EZRA NYE Memorial Scholarship, founded by his son-in-law, F. Wolcott Jackson, of Newark, 1000
93. The GRACE NEWCOMBE DENNING Scholarship, founded by Mrs. William Moir, of New York, 1500
94. Founded by a friend, 1000
95-96. The MCCORMICK Scholarships, founded by Mrs. McCormick, of Chicago, 2000
97. The WILLIAM CAMPBELL TRUSDELL Memorial Scholarship, founded by his father, Warren N. Trusdell of Newark, N, J., 1000
98. The HENRY M. ALEXANDER Scholarship, founded by a friend, 1000
99. The JOHN C. D. MATTHEWS Memorial Scholarship, founded by his mother, Mrs. Mary R. Matthews of Newark, N. J., 1000

The above scholarships are for the benefit of students in the Academic Department, with the exception of the ELIZABETH VAN CLEVE Scholarship, which may be assigned to a student in the School of Science.

About sixty scholarships were founded between the years 1853 and 1858, mainly through the efforts of President Maclean and Professor Hope. The last thirty-six were founded since the beginning of the Academic year 1885-6.

PECUNIARY AID.

For many years the University has, on application, remitted a portion of the tuition and other fees in the Academic Department of candidates for the ministry, of sons of ministers, and also of other applicants who present satisfactory testimonials of good moral character and of more than ordinary intellectual ability with the assurance that the aid requested is absolutely needed. In the case of students who are neither candidates for the ministry nor the sons of ministers, the remission of tuition is to be regarded as a loan to be repaid to the University whenever it can be done without serious financial embarrassment. All students in the School of Science, with the exception of the incumbent of the ELIZABETH VAN CLEVE Scholarship, are required to pay tuition.

In consequence of the liberal policy of the University the amount of tuition remitted has increased until it is now more than double the entire income from the scholarship and charitable funds. If this policy is to be continued a large increase in these funds is urgently demanded. The Trustees have accordingly appointed a joint committee of members of the Board of Trustees and of the Faculty, to increase the Scholarship Fund to $150,000. *This effort is commended to the attention and favor of the Alumni and other friends of the University.*

Scholarships may be founded by the payment of $1000 and designated as the donor may direct, the income from which will be accepted as payment of the tuition in the Academic department of *any student* to whom the donor may assign it, for *four years*—to be subsequently assignable by the Faculty.

Application for scholarships or for aid from the charitable funds should be made to Professor Duffield.

EXPENSES.

The following is the schedule of expenses for the year.

Board, 36 weeks	$ 3.00 to $7 per week.
Washing, 36 weeks	50 cents per week.
Tuition and public room fee, Academic	150.00 per annum.
Tuition and public room fee, School of Science	160.00 per annum.
Tuition, extra for Laboratory Chemistry, Senior elective	15.00 per annum.
Room rent (according to location of rooms)	30.00 to $175 per annum.
Fuel deposit (according to location of rooms)	17.00 to $26 per annum.
Gas deposit (according to location of rooms)	24.00 to $42 per annum.
Matriculation Fee, payable on entrance	5.00
Graduation Fee, payable second term, Senior year	12.00

For other special courses than that in Analytical Chemistry arrangements may be made upon consultation with the Professor in charge.

The charges for fuel and gas are approximations based upon the greatest amount used. An account of the actual consumption is kept with each room, and the exact charge is adjusted at the end of the year. The charge for fuel includes the cost of kindling, and the labor of carrying coal, making fires, etc.

Apparatus Deposits.—Students pursuing certain courses in the School of Science are required to make deposits to pay for apparatus injured or destroyed. At the end of the term any excess in favor of the student is placed to his credit on the bill for the next term. The deposits in the courses are:—Freshmen, first term, Geodesy, $8; Sophomores, first term, Geodesy, $5; Botany, $5; first or second term, Chemistry, $12. Juniors, first term, Geodesy, $6; first term, Chemistry, *c.*, $12. Seniors, first term, Geodesy, $4; Chemistry, *e.*, $15; Chemistry, *g.*, $12; Chemistry, Acad., $8; second term, Chemistry, *c.*, $10.

Students taking any of the courses in Graphics will require a drafting outfit costing from $18 to $25.

ESTIMATE OF ANNUAL EXPENSES.

ACADEMIC DEPARTMENT.

Attention is specially called to the following approximate estimate of the necessary annual expenses for a student occupying an unfurnished room in one of the colleges, without including clothes, traveling or vacation expenses:

	Min.	Medium.	Max.
Board, 36 weeks, at $3.00 to $7.00	$108.00	$180.00	$252.00
Washing, 36 weeks, at 50 cents per week	18.00	18.00	18.00
Tuition and Public Room Fees	150 00	150.00	150.00
Matriculation Fee (on Entrance)	5.00	5.00	5.00
Room Rent	30.00	60.00	175.00
Fuel	10.00	20.00	30.00
Gas		10.00	25.00
Total	$321.00	$443.00	$655.00
Deduct for Students on Scholarships (See page 159.)	100.00		
	$221.00		
Candidates for Ministry in special need of aid,	30.00		
	$191.00		

UNIVERSITY BILLS.

All University expenses, including board, must be paid in advance to the Treasurer of the University.

Students are required to call at the Treasurer's office in the course of the first ten days of each term, and to give information as to their place of boarding, etc., so that their bills can be made out. All bills must be paid within the first four weeks of the term. Failure to comply with this rule will deprive the student of the privileges of the University until payment is made, unless excused by special vote of the Faculty.

When a student enters the University before the middle of the term, he shall pay in full the usual charges for that term, with the exception of the charges for board and washing; if he enter after the middle of the term, he shall pay one-half. For board and washing he shall pay in proportion to the time.

When a student leaves the University, whether voluntarily or by dismission, before the middle of any term, one-half of the charges for tuition and public rooms for that term shall be refunded. But in the case of temporary absence and subsequent return, although the absence be for more than half a term, no such rebate shall be granted.

When a student is dismissed from the University for any cause, the advance deposit for board, washing, fuel and gas, beyond the time of his dismission, shall be refunded to his parent or guardian.

When at the end of the first term the amount of the advance deposit proves to be in excess of the sum required to defray the board, washing or room bills of any student, the excess shall be credited on his bill for the next term. At the end of the Academic year the amounts overpaid by the members of the *graduating class* for board, washing, room rent, fuel, or gas shall be refunded by the Treasurer to the student's parent or guardian. The parent or guardian of *every undergraduate* will be advised of the amount of excess to the credit of his son or ward, and such amount will be *carried over to his credit on the bill of the first term of the following year.* In case of withdrawal or dismissal from the University of any undergraduate, at the end of the college year such excess will be refunded by the Treasurer to the parent or guardian, when informed by the Clerk of the Faculty that such undergraduate has been withdrawn or dismissed from the University.

RULES GOVERNING THE ALLOTMENT AND RENTAL OF ROOMS.

1. Rooms shall be assigned for occupation during the following Academic year between the 15th of May and the 1st of June of each year.

2. This assignment shall embrace:

(a) All rooms occupied by students whose connection with the college will terminate at the end of the Academic year.

(b) The rooms of all Seniors, whether with room-mate or not. (Unless the room may be retained by a graduate or for a brother as elsewhere provided in the rules.)

(c) All rooms for which the lease has not been properly renewed.

3. An allotment may also take place at the close of the first term of each Academic year for the purpose of assigning such rooms as may then fall vacant.

4 *a*. The assignment of rooms shall in all cases not herein specially excepted take place in such a manner that specific rooms shall be assigned by lot.

b. The rooms to be assigned shall be classified according to the amount of their rental in five groups as follows:

1. The first group shall embrace rooms whose rental is from $25 to $35 inclusive.

2. The second group shall embrace rooms whose rental is from $40 to $66 inclusive.

3. The third group shall embrace rooms whose rental is from $70 to $100 inclusive.

4. The fourth group shall embrace rooms whose rental is from $105 to $140 inclusive.

5. The fifth group shall embrace rooms whose rental is from $150 to $180 inclusive.

c. The applicants for rooms shall be divided into corresponding groups, each applicant being required to inform the Treasurer in writing before the 10th of May or the 20th of January, as the case may be, both of his intention to enter the drawing and of the group in which he wishes to be placed.

d. Each drawing shall begin with the first group and proceed from that group through the other groups successively in the order given above. Any applicant who does not obtain a room in the group to which he first asked to be assigned may be allowed to draw in any higher group.

e. If there be any rooms remaining unassigned after a drawing, such rooms may be assigned by subsequent allotment, at such time before the end of the year or of the term as the Treasurer may appoint; such supplementary allotment to be made under the same rules as the principal allotment, with this exception, that the rooms disposed of by means of it may be classified as above or not at the discretion of the Treasurer.

f (*a*). Priority in the drawing shall be determined by the length of time the applicants have been members of the University. The first drawing shall include the names of all applicants who have been members of the University for more than one year. A second drawing shall include the names of all applicants who have been members of the University one year or less.

f (*b*). If the application for a double room shall be signed by students who have been members of the University different lengths of time, it shall be classified, and placed in the drawing in which the student who has been a member of the University the shortest length of time would be placed.

g. New students shall have choice of any rooms remaining vacant at the time of their entering upon residence in the order of their application after undergoing the entrance examinations for full standing, upon condition of immediately signing the lease required in all cases. [See Rule 5, *a.*]

h. Double rooms shall be separately classified and allotted in accordance with the above regulations. Only such suites as consist of a study and two bedrooms shall be considered double rooms within the meaning of this clause. No double room shall be assigned to a single individual, nor shall it be within the privilege of any single individual to draw for a double room. Every applica-

tion for a double room must give the names of two persons who intend to occupy the room together and who undertake to be jointly responsible for the rent of the same.

i. Whenever, for any reason, one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current Academic term, unless he agrees to pay the whole rent, or provide a roommate who shall join him in signing a new lease for the remainder of the Academic year.

5. *a.* The tenure and liabilities to those to whom rooms are assigned under these rules shall be the tenure and liabilities expressed in the following lease, which must be signed in the case of each room allotted by the student who is to occupy it and by his parent or guardian. This lease must be signed and delivered to the Treasurer in each case within ten days of the allotment, except in the case of new students, provided for under Rule 4, *g.*

This agreement made the day of , 189 , between the Trustees of Princeton University and of witnesseth that the said Trustees of Princeton University do hereby lease unto the said Room No. in the Entry of to hold for the Academic year of paying therefor during the said term unto the said Trustees of Princeton University the yearly rent of $ in two equal payments, to be made, the one within the first four weeks of the first term of the Academic year, the other within the first four weeks of the second term of the Academic year.

And the said covenants to pay the said rent in the manner and at the times aforesaid and to deliver up the said premises to the said Trustees of Princeton University or its legal representative at the end of said term in as good condition as the same now are or may be put into by the said Trustees of Princeton University, reasonable use and wear and tear thereof, and fire and other casualty excepted. The said lessee also covenants that he will not do or suffer to be done any damage in the leased premises, and that, if any damage beyond reasonable wear and tear be done, he will cause the same to be made good as soon as possible at his own expense, employing for that purpose the proper University workmen, and paying the cost thereof at once to the University Treasurer, it being understood that the damage here meant includes the break-

age of glass and locks, whether by accident or design. The said lessee further covenants that he will not sublet the same or any part thereof nor permit any other person or persons to occupy the same or any part thereof, nor make nor suffer to be made any alteration therein without the consent of the said Trustees of Princeton University for that purpose in writing first had and obtained. And the said lessee further covenants that the said Trustees of Princeton University through their authorized representatives may enter the said premises for the purpose of viewing or making improvements therein at any reasonable times in the day time, or at any other time for the legitimate purposes of University discipline. This lease is made on the express condition that it may be terminated by said Trustees through their representative.

b. Any occupant of a college room may retain his room until the end of his undergraduate or graduate course provided he annually notify the Treasurer of his intention of retaining it and sign a new lease before the 1st of May. Otherwise his room shall be considered vacant and shall be included in the next allotment. In case an occupant of a double room be left without a room-mate at the end of the Academic year, he may renew his lease upon condition of naming another student of the University who will become joint lessee with him for the following year unless the room-mate who leaves is a Senior or a fourth year Special. It shall also be the privilege of any occupant of a college room to renew his lease at the end of his own tenure in the name of his brother, when that brother is to enter the University immediately.

c. The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of the occupant of a college room to sell or transfer, directly or indirectly, his right of occupancy shall be deemed a fraudulent transaction, and will be dealt with by the Faculty as a grave breach of University law.

d. The occupant of a college room shall deposit with the Treasurer the sum of 25 cents for each key to his room that may be furnished him by the University; and all amounts paid under this clause shall be refunded upon the return of the key or keys furnished.

6. Students vacating college rooms shall be allowed to store any furniture not disposed of in a room designated by the University authorities, under the charge of a salesman appointed by the Uni-

versity, where it may be offered for sale. Furniture remaining unsold at the end of four months after the date of storing shall be disposed of at public auction to the highest bidder.

7. No exchange of rooms shall be allowed unless formally sanctioned in writing by the Treasurer; and then only upon terms explicitly stated in a written application signed by both parties to the proposed exchange, and not in contravention of the spirit of these rules. Such applications shall be kept on file in the Treasurer's office.

8. When rooms are vacated during a term the rent shall be paid until the end of the term. An occupant of a college room who expects to be absent on leave for a term may be released from the obligations of his lease, provided he notify the Treasurer before the beginning of the term during which he expects to be absent, and give up the room; but no abatement or drawback of room rent shall be allowed for any period less than a term, except in special cases, to be stated in writing, and by permission of the Treasurer.

Adopted by the Committee on Grounds and Buildings, February 9th, 1891.

STUDENTS OF THE UNIVERSITY.

GRADUATE STUDENTS.

N. B.—Fellows are not included in the following list. (Vide p. 23.)

William Park Armstrong, Jr., Selma, Ala., 209 H S
A.B., Princeton, 1894; A.M., 1895.

Edward John Baird, Londonderry, Ireland, 313 H S
A.B., Central University, Ky., 1894.

George Williamson Barr, Philadelphia, Pa., 31 A S

Edward Berger, Carlisle, Pa., 86 B S
A.B., Dickinson, 1896.

Robert William Blake, Princeton, N. J., Washington, Pa.
A.B., Princeton, 1887; A.M., 1891.

William John Bone, Thorndale, Pa., 33 B S
A.B., Princeton, 1895.

James Oscar Boyd, New York City, 16 B S
A.B., New York University, 1895.

Charles Henry Hardin Branch, Ellicott City, Md., 43 B S
A.B., Johns Hopkins University, 1895.

Henry Clay Briggs, Brooklyn, N. Y., 93 Mercer St.
A.B., Princeton, 1896.

James Maclin Brodnax, Mason, Tenn., 115 H S
A.B., Princeton, 1894.

Edwin Henry Bronson, Philadelphia, Pa., 187 Nassau St.
A.B., Princeton, 1896.

Louis Samuel Brooke, Ithaca, Mich., 72 B S
A.B., Alma College, 1896.

John Milton Brooks, Cleveland, O., 50 Nassau St.
A.B., Princeton, 1889; A.M., 1891.

Thomas Towson Brown, Jacksonville, Md., 406 H S
A.B., Lafayette, 1895.

George Washington Bryant, Mt. Clemens, Mich., 109 H S
A.B., Coe College, 1894.

George Hough Bucher, Carlisle, Pa., 108 H S
A.B., Dickinson, 1895.

William Irwin Campbell, Washington, D. C., 408 H S
A.B., New Windsor College, 1896.

Howard Doty Carpenter, Hancock, Mass.,
A.B., Princeton, 1895; A.M., 1896.

Ray Harrison Carter, Philadelphia, Pa., 17 A S
A.B., Princeton, 1895.

Winfield Miller Cleveland, College Corner, O., 87 A S
A.B., Miami University, 1896.

Charles Edward Combrink, Princeton, N. J., 118 Mercer St.
A.B., Wabash, 1896.

Charles Beach Condit, West Orange, N. J., 23 B S
A.B., Princeton, 1895.

Lester Morris Conrow, Long Branch City, N. J., 202 H S
A.B., Princeton, 1895.

William Brown Cooke, Princeton, N. J., 16 A S
A.B., Princeton, 1895.

John Walker Coontz, Neosho, Mo., 49 B S
A.B., Scarritte, 1895.

Samuel G. Craig, Tarkio, Mo., 42 B S
A.B., Princeton, 1895.

John Forsyth Crawford, Damascus, Syria,
A.B., Princeton, 1895.

Josiah Hughes Crawford, Philadelphia, Pa., 32 A S
A.B., Princeton, 1896.

Frank Linley Critchlow, Manchester, Eng., 7 Edwards Pl.
A.B., Princeton, 1896.

William Heber Crothers, Greenfield, O., 3 B S
A.B., Wooster, 1894.

Harold Sidney Davison, Wolfville, Nova Scotia, 76 Univ. Pl.
A.B., Acadia University, N. S., 1894.

David Harry Devor, Ashland, O., 21 B S
A.B., Wooster, 1895.

Joel Ambrose Dunkle, Circleville, O., 301 H S
A.B., Heidelberg, 1894.

Walter McKee Elliott, Louisville, Ky., 58 B S
A.B., Wabash, 1895.

Jay Carroll Everett, Olpe, Kan., 47 B S
A.B., College of Emporia, 1894.

Hugh Kerr Fulton, Lancaster, Pa., 36 A S
A.B., Franklin and Marshall, 1895.

Robert Reed Gailey, Fawn Grove, Pa., 9 N M R
A.B., Lafayette, 1893; A.M., Princeton, 1896.

Ezra P. Giboney, Hanover, Ind., 66 B S
A.B., Hanover, 1896.

George Louis Guichard, Allegheny, Pa., 217 H S
Ph.B., Franklin College, 1894.

Ernest Freeman Hall, Kalamazoo, Mich., 20 B S
A.B., University of Michigan, 1894.

John Sherman Hamilton, Ada, O., 76 Alexander St.
A.B., Ada College, 1895.

John Hanlon, Prescott, Ariz., 24 N Ed
C.E., Princeton, 1896.

Marshall Harrington, Logan, O., 10 B S
A.B., Princeton, 1893.

Norman Baldwin Harrison, Caldwell, N. J., 7 A S
A.B., Princeton, 1895.

Selden Long Haynes, S. McAlester, Ind. Ter., 25 B S
A.B., Princeton, 1896.

Fred Jay Hibbard, Fargo, N. Dak., 27 A S

James Alexander Hogg, Belfast, Ire., 4 A S
A.B., Royal University of Ireland, 1895.

Henry Burns Hostetter, Crawfordsville, Ind., 404 H S
B.S., Wabash, 1894.

Paul Griswold Huston, Cincinnati, O.,
A.B., Princeton, 1895; A.M., 1896.

Thornwell Jacobs, Clinton, S. C., 215 H S
A.B., Presbyterian College of South Carolina, 1894; A.M., 1895.

Franklin Cornwell Jennings, Union, S. C., 215 H S
A.B., Presbyterian College of South Carolina, 1892; A.M., 1893.

William Hallock Johnson, Sing Sing, N. Y., 57 B S
A.B., Princeton, 1888.

Samuel Martin Jordan, Stewartstown, Pa., 25 A S
A.B., Lafayette, 1895.

Edward Loudoun Kennedy, Merryall, Pa., 24 A S
A.B., Lafayette, 1896.

Harvey Klaer, Stroudsburg, Pa., 43 A S
A.B., Lafayette, 1896.

Marcius Wilson Kratz, Silver Dale, Pa., 75 B S
A.B., Lafayette, 1895.

William Edmund Lampe, Frederick, Md., 78 B S
A.B., Princeton, 1896.

Robert John Lockhart, New York City, 12 A S
A.B., College of the City of New York, 1895.

Clinton Woods Lowrie, O'Neill, Neb., 32 B S
A.B., University of Omaha, 1896.

Walter Lowrie, Warriors Mark, Pa., 61 B S
A.B., Princeton, 1894.

Charles Freeman Williams McClure, Princeton, N. J., 80 Univ. Pl.
A.B., Princeton, 1888; A.M., 1892.

Alexander McGaffin, Belfast, Ire., 209 H S
A.B., Princeton, 1894.

William Roderick McKay, Springville, Nova Scotia, 69 B S
A.B., Dalhousie University, 1896.

Frank Chalmers McKean, Hopkinton, Ia., 15 B S
A.B., Lenox College, 1894.

Carl Ambrose Magee, Plain Grove, Pa., 29 B S
A.B., Grove City College, 1895.

Samuel Dougherty Manifold, Sunnyburn, Pa., 67 B S
A.B., Lafayette, 1896.

Samuel Martin, Altoona, Pa., 64 B S
A.B., Lafayette, 1896.

Benjamin Allen Mason, Albia, Ia., 18 A S
A.B., Princeton, 1896.

Henry Buck Master, Philadelphia, Pa., 402 H S
A.B., Princeton, 1895.

Charles Henry Miller, Philadelphia, Pa., 24 A S
A.B., Lafayette, 1896.

Samuel Williams Moore, Hopewell, N. C., 41 B S
A.B., Davidson, 1893.

George Ray Morley, Oskaloosa, Kan., 74 B S
A.B., College of Emporia, 1896.

Isaac Stanley Mulholland, Pittsburgh, Pa., 303 H S
A.B., Lafayette, 1894; A.M., Princeton, 1896.

William Clarence Murdock, Murray River, Prince Edward Island, 69 B S
A.B., Dalhousie University, 1896.

Fred Neher, Princeton, N. J., Chicago, Ill.
A.B., Princeton, 1889; A.M., 1891.

John Campbell Neill, New York City, 40 B S
A.B., College of City of New York, 1895.

Edwin Mark Norris, Corning, Ia., 1 S D
A.B., Princeton, 1895.

Charles Edgar Patton, Warriors Mark, Pa., 52 B S
A.B., Princeton, 1896.

Alexander Hamilton Phillips, Princeton, N. J., Vandeventer Ave.
B.S., Princeton, 1887.

Thomas McKean Polk, Fagg's Manor, Pa., 67 B S
A.B., Lafayette, 1896.

Harry Hey Pratt, Saltville, Kan., 26 Edwards Pl.
A.B., College of Emporia, 1896.

Samuel Dobbins Price, Newark, N. J., 105 H S
A.B., New York University, 1893; A.M., Princeton, 1896.

Edward Charles Reeve, Hopkinton, Ia., 89 B S
A.B., B.S., Lenox College, 1894.

Daniel Russell, Jr., Manchester, Ia., 85 B S
B.S., Lenox College, 1894; A.B., 1895.

Samuel Christmas Kanaga Rutnam, Tellippallai, Jaffna, Ceylon, 101 H S
A.B., Madras Christian College, Madras University, 1891.

James Alvan Sankey, Emporia, Kan., 315 H S
A.B., College of Emporia, 1895.

Elmer Clifton Shaver, Shannondale, Ind., 46 B S
Wabash.

William T. Sherman Seyfert, Reading, Pa., 43 A S
A.B., Lafayette, 1896.

Richard Henry Sidebotham, Spring Lake, Mich., 12 B S
A.B., Alma College, 1896.

Thomas McCauley Simanton, Hackettstown, N. J., 87 A S
A.B., Lafayette, 1896.

Thomas Jay Simons, Virden, Ill., 25 A S
A.B., Illinois College, 1895.

George Rosengarten Sinnickson, Philadelphia, Pa., 15 U
C.E., Princeton, 1896.

Alexander Smith, Clydesdale, Nova Scotia, 87 B S
A.B., Dalhousie University, 1895.

Walter Everett Smith, Philadelphia, Pa., 108 H S
A.B., New Windsor College, 1895.

Homer Clay Snitcher, Greenwich, N. J., 52 B S
A.B., Princeton, 1896.

August Whitman Sonne, Evansville, Ind., 56 B S
A.B., Wabash, 1896.

Josiah Thomas Stevenson, Philadelphia, Pa., 44 B S

Ernest Taylor Stewart, Indiana, Pa., 2 N R
A.B., Princeton, 1895.

James Monroe Stewart, Philadelphia, Pa., 46 A S
Ohio University.

Franklin Dudley Stone, Negaunee, Mich., Refectory, S
Wabash.

Charles Dana Stough, Ponca, Neb., 17 B S
B.S., Midland College, 1896.

Thomas Reber Taggart, Hughesville, Pa., 1 B S
A.B., Bucknell, 1896.

Archie Hall Throckmorton, Snickersville, Va., 8 S E
A.B., Roanoke College, 1896.

George Harvey Trull, Baltimore, Md., 107 H S
A.B., Johns Hopkins University, 1894.

Harry Burl Vail, Logan, O., 88 B S
A.B., Wooster, 1896.

John Van de Erve, Hein, South Dakota, 200 H S
A.B., Hope College, 1895.

Frank Hawley Ward, Rochester, N. Y., 6 S E B
A.B., Princeton, 1895.

Howard Crosby Warren, Princeton, N. J., 80 Univ. Pl.
A.B., Princeton, 1889; A.M., 1891.

William Henry Wells, Reading, Pa., 308 H S
A.B., Lafayette, 1896.

Samuel Ernest Paul White, Ashland, O., 60 Alexander St.
A.B., Wooster, 1895.

Clarke Benedict Williams, Corning, N. Y., Kalamazoo, Mich.
A.B., Princeton, 1890.

George Franklin Williams, Blair, Neb., 32 B S
A.B., University of Omaha, 1896.

Harry Stoddard Williston, Northampton, Mass., 32, Pyne Bldg.
A.B., Amherst, 1895.

Louis Clayton Woodruff, Southington, Conn., 28 Dickinson St.
A.B., Princeton, 1895; A.M., Princeton, 1896.

Clarence Elmer Woody, Oskaloosa, Ia., 305 H S
A.B., Penn College, 1892.

GRADUATE STUDENTS, ... 115

STUDENTS IN THE ACADEMIC DEPARTMENT.

SENIOR CLASS.

Henry Brown Abbot,	Zanesville, O.,	15 N E
Alexander John Atcheson Alexander,	Spring Station, Ky.,	15 N E
Walter Haskell Andrus,	Williamsport, Pa.,	9 N R
Edward William Axson,	Princeton, N. J.,	4 M D
Henry Milton Beam,	Intercourse, Pa.,	8 S Ed
Jerome Bradley,	Dobbs Ferry, N. Y.,	6 E W
Francis Solomon Brenneman,	Volant, Pa.,	85 S Ed
Howard Crosby Brokaw,	New York City,	8 E W
Frederick Walworth Brown,	Manasquan, N. J.,	88 N Ed
William Wells Church,	Washington, D. C.,	12 N M R
Percy Robert Colwell,	Warwick, N. Y.,	18–19 S Ed
Robert Comin,	New Concord, O.,	11 N
LeRoy Clark Cooley, Jr.,	Poughkeepsie, N. Y.,	18–19 S Ed
Frank Bertine Cowan,	Hobart, N. Y.,	20 S E
John Hamilton Cowan,	Pittston, Pa.,	9 S Ed
Earl Walker Cox,	Harrisburg, Pa.,	8 S R
Roy Galbraith Cox,	Harrisburg, Pa.,	8 S R
Frank Grenville Curtis,	New York City,	5 S W
William Potter Davis, Jr.,	Millville, N. J.,	12 S W
Walter Moore Dear,	Jersey City, N. J.,	14 W W H
John Barclay DeCoursey,	Philadelphia, Pa.,	35 U
Walter Meredith Dickinson,	Trenton, N. J.,	15 W W
John Trumble Downing,	Pittston, Pa.,	14 S M R
Charles Johnson Dunlap,	Watertown, N. Y.,	18 N M R
Charles Francis Dunn,	Wooster, O.,	26 S Ed
Edward Graham Elliott,	Murfreesboro, Tenn.,	9 N R
Seward Erdman,	Morristown, N. J.,	2 S D
Thomas St. Clair Evans,	Blairsville, Pa.,	1 N W
William Fuller Evans,	Greenville, Pa.,	20 W W
John Musser Frame,	Reading, Pa.,	16 N W
Selden Ely Gill,	Philadelphia, Pa.,	8 W W

Walter Beatty Gilmore, Chambersburg, Pa., 4 S E
John William Graham, Jr., Denver, Col., 15 N W
Albert Brooks Graver, Oakmont, Pa., 8 N D
Julian Arthur Gregory, East Orange, N. J., 2 E M W
Archibald Alexander Gulick, Princeton, N. J., 26 Mercer St.
Howard Langley Guss, Mifflinburg, Pa., 42 N Ed
John Porter Hall, Minneapolis, Minn., 8 N R
Robert Lee Hallett, Milford, Del., 5 N Ed
John Linton Harkness, Philadelphia, Pa., 2 S W B
Herbert Staley Harris, Rochester, N. Y., 15 S M R
Walter Stewart Harris, Minneapolis, Minn., Nassau Hotel
Walter Craig Hill, Covington, Ky., 7 E B
James Morley Hitzrot, McKeesport, Pa., 8 N D
Dwight Ellinwood Hollister, Rutherford, N. J., 22 M D
Augustine Minshall Hopper, Baltimore, Md., 4 E M W
George Howe, Columbia, S. C., 4 M D
James Abraham Hurn, A.B., Lockport, Ill., 22 Edwards Pl.
Paul Hurst, Washington, D.C., 11 E B
John Gere Jayne, Berwick, Pa., 2 E M W
Frederick Nevins Jessup, Beirut, Syria, 18 S Ed
Willard Parker Jessup, Goshen, N. Y., 20 W W
Walter Lathrop Johnson, Sing Sing, N. Y., 22 Edwards Pl.
John Henry Keener, Harrisburg, Pa., 5 N Ed
George Harrington Kelly, East Liverpool, O., 12 N E
Arthur March Kennedy, Philadelphia, Pa., 2 M D
Francis Adonijah Lane, Franklin, O., 11-12 U
Arthur Willis Leonard, Cincinnati, O., 12 N D
William Heberton Liggett, Cedar Knoll, Pa., 5 S Ed
James McClure, Pittsburgh, Pa., 1 S E
William Allen McLaughlin, Ocean Grove, N. J., 15 N Ed
David Magie, Jr., New York City, 33 Prospect Av.
Henry Everitt Mattison, Brooklyn, N. Y., 6 N R
Burton Rockwood Miller, Germantown, Pa., 4 S R
Joseph Walter Miller, Friesburg, N. J., 18 S W
Lucius Hopkins Miller, Roselle, N. J., 6 S W B
Henry Charles Millington, A.B., Meriden, Conn., 22 Edwards Pl.
Thomas Sumption Minker, A.B., Birdsboro, Pa., 3 N Ed
Duncan Mackey Moore, Mt. Carroll, Ill., 8 N M R
John Tomys Moore, Arnold Station, Pa., 4 S E B

Victor Philip Mravlag,	Elizabeth, N. J.,	13 S D
Daniel Edward Nevin,	Pittsburgh, Pa.,	85 S Ed
Frederic Janvier Newton,	Jalandhar, India,	41 N Ed
John Henry Nichols,	Delhi, N. Y.,	30 S Ed
Herschel Augustus Norris,	Woodstown, N. J.,	1 W B
Henry Chapman Olcott,	New York City,	5 N E
Horace Greeley Padget,	Owego, N. Y.,	35 N Ed
Samuel Morrow Palmer,	Philadelphia, Pa.,	2 M D
Ariovistus Pardee,	Germantown, Pa.,	9 S W
Austin McDowell Patterson,	Xenia, O.,	14 E W
True Perkins,	Cleveland, O.,	10 S E
Farrand Baker Pierson,	Brooklyn, N. Y.,	1 N W
Wilfred McIlvaine Post,	Beirut, Syria,	17 S Ed
William Boyd Ramsey,	Belle Centre, O.,	18 S Ed
Harry Norman Reeves,	Montclair, N. J.,	2 N D
Theodore Fairbanks Reynolds,	East Orange, N. J.,	14 S D
Will Ayres Reynolds,	Philadelphia, Pa.,	2 E M W
Charles Gorman Richards,	Pittston, Pa.,	14 S M R
William Moody Robb,	Amsterdam, N. Y.,	3 S W B
Charles Kirkland Roys,	La Crosse, Wis.,	4 S W
Henry Norris Russell,	Oyster Bay, N. Y., 79 Alexander St.	
Edwin Howard Scott,	White Haven, Pa.,	D, W B
Leander Howard Shearer,	New York City,	11 E W
James Smitham,	Nesquehoning, Pa.,	16 N Ed
Nathan Smith Smyser,	Ft. Wayne, Ind.,	6 N R
Richard Briggs Smyth,	Charleston, S. C.,	2 N D
Selden Spencer,	St. Louis, Mo.,	1 W M W
Nicholas Stahl,	Scranton, Pa.,	3 N E
Robert Fulton Sterling,	Blairsville, Pa.,	4 N W
William Adams Walker Stewart,	New York City,	12 E W
Henry Ford Stockwell,	Hammonton, N. J.,	3 N Ed
Samuel Augustus Bridges Stopp, A.B.,	Allentown, Pa., 168 Nassau St.	
Hervey Studdiford,	Trenton, N. J.,	3 S W
Frederick Sturges, Jr.,	New York City,	13 W W
Charles Irving Taylor,	Waterbury, Conn.,	6 N D
Benjamin Harvey Thompson,	Pittsburgh, Pa.,	1 W M W
Edward Cameron Thompson,	Middletown, N. Y.,	4 S Ed
Samuel Huston Thompson, Jr.,	New Brighton, Pa.,	12 W B

Albert Clinton Tyler,	Wyoming, O.,	31 N Ed
Harry Van Cleaf,	Hightstown, N. J.,	86 S Ed
Harry Barnes von Krug,	Kingston, Pa.,	19 S M R
John Talbot Ward,	Denver, Col.,	28 N Ed
Julius Pierson Wheeler,	Montclair, N. J.,	D, W B
Ephraim Williams, Jr.,	Stonington, Conn.,	4 S R
John Adams Williams,	Nescopeck, Pa.,	5 N D
Percy Herbert Williams,	New York City,	6 N E
Alexander McDowell Wilson, A.B.,	East Brook, Pa.,	4 S W
John Fleming Wilson,	Portland, Or.,	1 W W
Frank Montgomery Wood, Jr.,	Fargo, N. D.,	31 N Ed
Allen Stewart Wrenn,	Brooklyn, N. Y.,	1 S W B
Samuel Stewart Yantis, A.B.,	Poplar Plains, Ky.,	2 S E
Walter Scott Yeatts,	St. David's, Pa.,	35 U

SENIORS, ... 129

JUNIOR CLASS.

Daniel Fickes Altland,	Dillsburg, Pa.,	12 E B
Alfred Edward Alton,	Troy, N. Y.,	1 E B
Charles Bradley Andrews,	Zanesville, O.,	4 N R
George Alexander Armstrong,	Newburgh, N. Y.,	42 S Ed
Henry Linn Bassett,	Langhorne, Pa.,	7 N W
Ward Atlee Batchelor,	Buffalo, N. Y.,	9 E B
Louis Pintard Bayard, Jr.,	Short Hills, N. J.,	35 Univ. Pl.
Robert Livingston Beecher,	Vancouver, B. C.,	9 N W
Harry Elijah Belcher,	Newark Valley, N. Y.,	E, E B
Robert Smith Birch,	Reading, Pa.,	16 N W
John Insley Blair, Jr.,	New York City,	2 W B
Alexander Russell Bond,	Plainfield, N. J.,	4 N E
Robert Rankin Boyce,	East Orange, N. J.,	14 N W
Hamilton Boyd,	Fonda, N. Y.,	10 S M R
Frankland Briggs,	Trenton, N. J.,	3 E W
Hugh Arbuthnot Brown,	Manasquan, N. J.,	38 N Ed
Lester Peck Bryant,	Princeton, Ill.,	16 N Ed
Alexander Scott Bullitt,	Louisville, Ky.,	50 U
James Henry Caldwell, Jr.,	Titusville, Pa.,	6 E M W
William Tuttle Carter, Jr.,	Newark, N. J.,	14 N W
John Woolman Churchman,	Burlington, N. J.,	7 S R

Edgar Marvin Clark,	Philadelphia, Pa.,	19 W W
Benjamin Coates,	Philadelphia, Pa.,	45 U
Charles Grenville Cole,	Dunmore, Pa.,	21 N Ed
William Silvanus Covert,	Delhi, N. Y.,	30 S Ed
Chauncey Gilbert Cowell,	East Orange, N. J.,	9 N Ed
Clarence Porter Cowles,	Albany, Vt.,	37 S Ed
John Wallace Cunningham,	Blairsville, Pa.,	1 S Ed
Robert Hare Davis,	Philadelphia, Pa.,	10 W W
Roy Paul Miller Davis,	Pittsburgh, Pa.,	29 N Ed
Franklin Woolman D'Olier,	Burlington, N. J.,	7 S R
Seth Russell Downie,	Harrisburg, Pa.,	2 N Ed
Robert Dunning Dripps,	Philadelphia, Pa.,	7 S W
Francis Elbert DuBois,	New York City,	18 N W
Richard Everett Dwight,	Plainfield, N. J.,	14 S D
Arthur Read Elmer,	Trenton, N. J.,	4 S M R
Frank Nelson Emerson,	Peoria, Ill.,	E, U
Howard Crosby Foster,	New York City,	19 S E
William Miller Gamble,	York, Pa.,	10 S Ed
Charles Albert George,	New York City,	2 S M R
Elmer Ewing Green, Jr.,	Trenton, N. J.,	7 W W
Henry Harrison Hadley, Jr.,	New York City,	24 N Ed
Charles Harrison Hale,	Columbus, Miss.,	1 N M R
Edgar Halliday,	Brooklyn, N. Y.,	27 N Ed
Charles Woodruff Halsey,	Ithaca, N. Y.,	14 N M R
Ralph Werner Harbison,	Allegheny, Pa.,	35 Univ. Pl.
William Albert Harbison,	Allegheny, Pa.,	35 Univ. Pl.
Harry Wilde Harris,	East Orange, N. J.,	67 U
Andrew Edward Harvey,	Detroit, Mich.,	B, W B
William Elias Hedges,	Chicago, Ill.,	9 E B
Ralph Woods Hench,	Harrisburg, Pa.,	7 M D
William S Holmes,	Freehold, N. J.,	18 S D
Oliver Wolcott Jackson,	Newark, N. J.,	11 N W
Edward Rutter James,	West Pittston, Pa.,	29 N Ed
Frederic Leopold Johnson,	Newark, N. J.,	B, W B
George White Johnson,	Hackensack, N. J.,	26 M D
Ivy Ledbetter Lee,	Atlanta, Ga.,	8 S Ed
Burt Hayes Leonard,	Beaver, Pa ,	16 N E
Stacy Barcroft Lloyd,	Philadelphia, Pa.,	9 E W
Matthew Lowrie,	Warriors Mark, Pa.,	17 S W

William Frank McCombs,	Hamburg, Ark.,	9 S M R
Charles Lester McCoy,	Peoria, Ill.,	4 E B
Herbert McDermott,	Chattanooga, Tenn.,	26 N Ed
James Wilson Mack,	Indiana, Pa.,	7 S M R
Robert McKelvy,	Titusville, Pa.,	6 E M W
Thomas Goodman McWilliams,	Chicago, Ill.,	12 W B
Wurtele Marston,	New York City,	15 E W
Harry Oliver Martin,	Mifflintown, Pa.,	E, E B
Paul Curtis Martin,	Springfield, O.,	6 S R
Springer Harbaugh Moore,	Sewickley, Pa.,	6 M D
Milton Baldwin Morehouse,	East Orange, N. J.,	41 S Ed
Clifford Abbott Morton,	New Egypt, N. J.,	7 S Ed
Harold Bond Nason,	Philadelphia, Pa.,	10 M D
William E Nicely,	Dayton, Ind.,	19 W W
Harrington Spear Paine,	New York City,	4 N R
Harry Parsons,	Williamsport, Pa.,	6 E M W
John Macmillan Stevenson Patton,	Princeton, N. J.,	Prospect
Ezra Parmelee Prentice,	New York City,	18 S W
George Griffiths Reichner,	Philadelphia, Pa.,	46 U
Howard Roland Reiter,	Philadelphia, Pa.,	15 N Ed
Richard Frederick Lot Ridgway,	Cream Ridge, N. J.,	7 S Ed
Philip Ely Robinson,	Sewickley, Pa.,	1 E M W
Addison Priest Rosenkrans,	Newton, N. J.,	7 S E B
Halsey Sayles,	Princeton, N. J.,	245 Nassau St.
John Matthew Scott,	Frankfort, Ky.,	8 E M W
Edmund Bayly Seymour, Jr.,	Germantown, Pa.,	17 M D
Walter Allen Seymour,	New York City,	16 U
Caleb Edgar Shreve,	Mount Holly, N. J.,	24 M D
George Vivian Smith,	Lakewood, N. J.,	20 M D
Latimer Painter Smith,	Philadelphia, Pa.,	5 S D
Edwin McMaster Stanton,	Philadelphia, Pa.,	11 E B
Leon Stein,	Newark, N. J.,	9 S D
Henry Mears Stevenson,	Philadelphia, Pa.,	27 Univ. Pl.
James Franklin Supplee, Jr.,	Baltimore, Md.,	8 S E B
Frederick Judson Holden Sutton,	New York City,	10 S W
Joseph Simon Thomas,	Dunellen, N. J.,	18 N W
Walter Thomas,	Milford, Del.,	42 N Ed
Samuel Garver Thomson,	Altoona, Pa.,	15 S W
Henry Vanderbilt Tulloch,	Washington, D. C.,	8 W W

Franklin Upshur,	Baltimore, Md.,	20 E W
Wynant Davis Vanderpool,	Morristown, N. J.,	5 E W
Harry Budd Van Dusen,	Cranbury, N. J.,	38 S Ed
Lewis Harlow Van Dusen,	Philadelphia, Pa.,	5 E B
James Edward Van Dyke,	Stockton, N. J.,	A, E B
Joseph Smith Van Dyke, Jr.,	Cranbury, N. J.,	10 E M W
Frank Keely Watson,	Aldine, N. J.,	10 E M W
Benjamin Remington Weld,	Minneapolis, Minn.,	5 S M R
Harold Bertrand Wells,	Columbia, N. J.,	10 E M W
Albert Payson Williams, Jr.,	Frenchtown, N. J.,	8 S E
Meade Tyrrell Williams,	St. Louis, Mo.,	17 S E
Wayne MacVeigh Wilson,	Philadelphia, Pa.,	5 W M W
Alexander Witherspoon,	Louisville, Ky.,	10 S E B
Harvey Lee Wyatt,	Wilmington, Del.,	20 S W
Howard Herr Yocum,	Columbia, Pa.,	1 E M W

JUNIORS, ... 114

SOPHOMORE CLASS.

Alexander Armstrong, Jr.,	Hagerstown, Md.,	G, U
Robert Lynn Bachman, Jr.,	Knoxville, Tenn.,	9 E B
David Boyce Bannerman,	Brooklyn, N. Y.,	8 S E B
William Francis Barret,	Frankfort, Ky.,	11 M D
John Henry Bawden,	Freehold, N. J.,	33 U
Wilson Thomas Moore Beale,	Philadelphia, Pa.,	18 E W
Howard Stephen Bennett,	New York City,	18 S E
Albert Dock Bigler,	Clearfield, Pa.,	M, U
John Hugh Bissell,	West Medford, Mass.,	32 U
Thomas Dezelle Blair,	Plainfield, N. J.,	8 S E
Frederick Blanchard,	Bellefonte, Pa.,	2 S W
Samuel Bowman Bope,	Findlay, O.,	2 N W
Donald Boyd,	Fonda, N. Y.,	10 S M R
William Fairview Boyd,	Lansdowne, Pa.,	12 S Ed
Lucian Scott Breckinridge,	Washington, D. C., 14 Edwards Pl.	
Charles Henry Breed,	Pittsburgh, Pa.,	K, U
John Rowe Brewer,	Chambersburg, Pa.,	9 S R
Horace Graham Butler,	Blairstown, N. J.,	28 S Ed
Thomas Clyman Campbell,	Port Jervis, N. Y.,	18 S W
Walter Jenkins Campbell,	New York City,	14 N E

.Norman McLeod Carter,	Huntington, N. Y.,	19 W W
John Hartford Chidester,	Dobbs Ferry, N. Y.,	45 Univ. Pl.
Reeve Chipman,	Chicago, Ill.,	77 U
Junius Paul Clark,	Philadelphia, Pa.,	66 U
William Averill Cleland,	Duluth, Minn.,	5 N E
Francis Hopkinson Coffin,	Phœnixville, Pa.,	19 N E
John T. S. Collier,	Paterson, N. J.,	10 E W
Harry Pollard Converse,	Louisville, Ky.,	1 S M R
Horace Stuart Cory,	Newark, N. J.,	2 N E
James Lowrie Crane,	Mount Sterling, Ill.,	72 U
Edwin Gordon Crowdis,	N. E. Margaree, N. S.,	2 S Ed
Edwin Ernest Curtis,	Oil City, Pa.,	92 Stockton St.
William Pratt Dale,	Louisville, Ky.,	48 U
Edward Coleman Delafield,	New York City,	9 E B
Russell Eugene Dexter,	Philadelphia, Pa.,	5 N M R
Irvine Rutherford Dickey,	Oxford, Pa.,	310 H S
Robert Ernest Dismukes,	Columbus, Ga.,	12 S M R
Andrew Bradley Duvall, Jr.,	Washington, D. C.,	C, U
Conover English,	Elizabeth, N. J.,	68-69 U
Walter Collins Erdman,	Germantown, Pa.,	2 S D
Edwin Fitzgerald Ferris,	Pittston, Pa.,	G, U
Noel Bleecker Fox,	Morristown, N. J.,	O, U
Charles Yoe Freeman,	Chicago, Ill.,	15 N W
William Hanington Galarneau,	Albion, N. Y.,	19 S W
Elmer Hendrickson Geran,	Matawan, N. J.,	8 S E B
Edgar Marsh Gibby,	Princeton, N. J.,	194 Nassau St.
George Wadsworth Gordon,	Washington, D. C.,	192 Nassau St.
John Kyle Gordon,	Fannettsburg, Pa.,	18 N E
Charles Lee Hamilton,	Louisville, Ky.,	4 W M W
Joseph Thornley Hanlon,	Pennington, N. J.,	24 N Ed
Harold Charles Harmon,	Hoosick Falls, N. Y.,	20 N E
Albert Windemuth Harris,	Newark, N. J.,	9 N D
James Henry Harrison,	Caldwell, N. J.,	C, E B
William Edgar Heron,	Chattanooga, Tenn.,	P, U
Charles Henry Howe,	Syracuse, N. Y.,	K, U
Samuel Culbertson Huey,	Philadelphia, Pa.,	I, U
Charles Laurance Humphrey,	Towanda, Pa.,	10 N
Elmer Ellsworth Schultz Johnson,	New Berlinville, Pa.,	63 U
Robert Daniel Johnston, Jr.,	Birmingham, Ala.,	8 S E B

Oliver Dimon Kellogg,	Vineland, N. J.,	7 N M R
Edwin Logan Kendall,	New York City,	T, U
Thomas Grady Kennedy,	Covington, Ky.,	81 U
Robert Barbee Kingsbury,	East Orange, N. J.,	12 M D
George Blackburn Kinkead, 2nd,	Poughkeepsie, N. Y.,	168 Nassau St.
Joseph Needham Kinney,	Poughkeepsie, N. Y.,	M, U
Norman Elias Koehler,	Kingston, Pa.,	19 S M R
Maxwell Hillegass Kratz,	Philadelphia, Pa.,	62 U
Otho Scott Lee, Jr.,	Belair, Md.,	38 U
Nicholas Frederick Lenssen,	New York City,	17 N W
Henry Bertram Lewis,	Germantown, Pa.,	70–71 U
George Heyser Light,	Bedington, W. Va.,	M, U
Edward Daland Lovejoy,	Philadelphia, Pa.,	
Edwin Augustus McAlpin, Jr.,	Sing Sing, N. Y.,	35 U
William Calder McGibbon, Jr.,	New York City,	9–10 U
Willis Henry McGraw,	Cortland, N. Y.,	4 N W
James Allan Mackenzie,	San Francisco, Cal.,	34 N Ed
Watson Marshall,	Pittsburgh, Pa.,	13 U
Harrie Breneman Martin,	Springfield, O.,	6 S R
William Smith Miles,	Peoria, Ill.,	4 E B
Herbert Francis Mitchell,	Passaic, N. J.,	20 N E
Samuel Moore,	Trenton, N. J.,	8 S W
Charles Hay Morton,	Winchester, Ky.,	2 S E
Henry Seymour Mudge,	Princeton, N. J.,	46 Mercer St.
Warren Nelson Nevius,	Glen Ridge, N. J.,	8 S M R
Edward Thompson Newton,	Jalandhar, India,	4 N Ed
James Lawson Norris, Jr.,	Washington, D. C.,	5 S W B
James Henry Northrup,	Augusta, N. J.,	40 S Ed
Harry Zebulon O'Brien,	Clarksboro, N. J.,	16 S M R
Harry Keppele Bunting Ogle,	Philadelphia, Pa.,	80 Mercer St.
Clarence Henry Parker,	Freehold, N. J.,	8 S M R
Henry Blackiston Patton,	Philadelphia, Pa.,	74 U
George Elliott Peebles,	Pittsburgh, Pa.,	C, U
William Black Pell,	New York City,	25 M D
Elias Eckfeldt Perkins,	Chester, Pa.,	64–65 U
Albert Halsey Pierson,	East Orange, N. J.,	68–69 U
Merle Newton Poe,	Findlay, O.,	2 N W
John Gould Ralston,	Chicago, Ill.,	19 Univ. Pl.

George Kinner Reed,	Newville, Pa.,	2 S W
Nathaniel Smith Reeves,	West Brooklyn, N. Y.,	31 S Ed
John McLaren Richardson,	Geneva, N. Y.,	2 S W
John Henry Rodney, Jr.,	New Castle, Del.,	L, U
William Scheerer Roe,	Newark, N. J.	70-71 U
Jonathan Causby Royle,	Salt Lake City, Utah,	4 U
George Jeffrey Russell,	Montclair, N. J.,	17 E W
Nathan Southwick Schroeder,	Brooklyn, N. Y.,	1 S E
William Magill Schultz,	Danville, Pa.,	19 W W
Edgar Clarence Sheppard,	Tuckahoe, N. J.,	18 S E
Raymond Wood Smith,	Newark, N. J.,	7 E M W
Robert Hamilton Southard,	Brooklyn, N. Y.,	10 N E
William Wagner Staake,	Philadelphia, Pa.,	N, U
James Gardner Stevenson,	Brooklyn, N. Y.,	1 S E
Douglas Bruen Stewart,	New York City,	O, U
Luther Milton Strayer,	Dillsburg, Pa.,	18 S E
Lewis Smith Thomas,	Dunellen, N. J.,	18 N W
Charles Rusling Uhle,	Blairstown, N. J.,	19 N E
Cyrus Hamlin Vail,	Blairstown, N. J.,	19 N E
James Moncur Vincent,	Hamilton, Can.,	C, E B
Garrett S. Voorhees,	Princeton, N. J.,	33 Chambers St.
Frank Corey Voorhies,	Woodbury, N. J.,	110 Nassau St.
Samuel Johnston Watson,	Greenville, Pa.,	12 N E
Richard Webster,	Islip, N. Y.,	12 S D
Alfred Sewall Weston,	Hammonton, N. J.,	4 S D
Max Charles John Wiehle,	Washington, D. C.,	3 S E B
James Gibson Wilson, Jr.,	Milwaukie, Ore.,	1 W W
Jay Ralph Woodcock,	Bellefonte, Pa.,	5 N E

SOPHOMORES, ... 125

FRESHMAN CLASS.

John Warren Armitage,	Newark, N. J.,	5 S E
Herbert Douglas Austin,	Erie, Pa.,	87 N Ed
Theodore Baker,	Belle Vernon, Pa.,	148 Nassau St.
Horace B. Bannard, Jr.,	Long Branch, N. J.,	66 Nassau St.
Hugh Cassell Barr,	Davenport, Ia.,	81 Univ. Pl.
Nathaniel Deyo Belknap,	Newburgh, N. Y.,	18 E W
Livingston Ludlow Biddle,	Bryn Mawr, Pa.,	19 M D

Henry Alford Boggs, Philadelphia, Pa., 11 Vandeventer Av.
Walter Cowles Booth, Danbury, Conn., 18 N Ed
John Curtis Borden, Manasquan, N. J., 66 Nassau St.
Samuel Winter Bowne, Jr., Brooklyn, N. Y., 47 Univ. Pl.
Andrew Culver Boyd, Lansdowne, Pa., 12 S Ed
Andrew Hunter Boyd, Jr., Cumberland, Md., 192 Nassau St.
Harry John Brandt, St. Louis, Mo., 26 N Ed
Lewis Gillingham Brearley, Lawrenceville, N. J., 89 N Ed
Owsley Brown, Springfield, Ill., 188 Nassau St.
Malcolm Griswold Buchanan, Trenton, N. J., 148 Nassau St.
Ralph Polk Buell, Philadelphia, Pa., 14 & 15 U
Edgar Washington Burchfield, Mifflintown, Pa., 23 N Ed
Edmund Stevenson Burke, Jr., New York City, 35 Univ. Pl.
Charles Edward Burr, 3rd, Columbus, O., 35 Univ. Pl.
Robert Samuel Burr, Lyons, N. Y., 4 S W
Richard McCall Cadwalader, Jr., Ft. Washington, Pa., 19 M D
James Robinson Campbell, Beattystown, N. J., 40 S Ed
Matthew Finlay Carrott, Quincy, Ill., 39 Nassau St.
Robert Williams Carter, Montclair, N. J., 11 S E
David Laurance Chambers, Washington, D. C., 2 U
W. Irving Clark, Jr., New York City, 19 Univ. Pl.
John Lloyd Coates, Philadelphia, Pa., 45 U
Henry Jessup Cochran, Morristown, N. J., 11 S E
John Williams Converse, Rosemont, Pa., 23 M D
Rutherford Hayes Corbin, Governors Island, N. Y., 31 Univ. Pl.
James Cromer, Indianapolis, Ind., 11 S Ed
Henry Kilbourne List Dalzell, Wheeling, W. Va., 2 Nassau St.
John Lionberger Davis, St. Louis, Mo., 31 Univ. Pl.
William Harper Davis, Philadelphia, Pa., 44 Wiggins St.
Nathaniel Wheaton Dean, Rutherford, N. J., 27 Mercer St.
Edwin Doddridge Dewitt, Deckertown, N. J., 1 N D
James Reid Dickson, Scranton, Pa., 32 Mercer St.
George Perry Dillenback, New York City, 21 Dickinson St.
Albert Bayard Dod, South Orange, N. J., 16 Dickinson St.
Frederick Heath Douglas, Newark, N. J., 39 Univ. Pl.
Christopher Easton, Tabriz, Persia, 28 Chambers St.
John Ekings, Paterson, N. J., 44 Vandeventer Av.
Henry Howard Ellison, Jr., Philadelphia, Pa., 11 S D
Herbert Kingsbury England, Washington, N. J., 28 Chambers St.

John Edgar Evans, Ebensburg, Pa., 11 Dickinson St.
Samuel Evans, Trenton, N. J., 16 Dickinson St.
Charles Beatty Finley, Jr., Elkton, Md., 158 Nassau St.
Jacob Fischel, Newark, N. J., 9 S D
Stoughton Alonzo Fletcher, Indianapolis, Ind., Dickinson St.
Frederick Ward Ford, Morristown, N. J., 16 Dickinson St.
William S. Groesbeck Fowler, New York City, 33 Pyne Building
Pendleton Rogers Fuller, New York City, 19 Univ. Pl.
Steve Ganson, Kansas City, Mo., 5 N D
John Crane Gardiner, Brooklyn, N. Y., 32 Chambers St.
Marshall Geer, Summit, N. J., 4 W M W
Joseph Chambers George, Mont Alto, Pa., 80 U
Elmer Schultz Gerhard, Palm, Pa., 63 U
William John Tolan Getty, New York City, 36 N Ed
Ralph Adelbert Goodenough, Windsor, N. Y., 4 N D
Thomas Griffith Haight, Colts Neck, N. J., 8 S M R
John Symons Hale, Atlanta, Ga., 1 N M R
William Samuel Hammond, Jr., Altoona, Pa., 29 Vandeventer Av.
Clarence A. Hastings, Morristown, N. J., 148 Nassau St.
George Davis Hendrickson, Mt. Holly, N. J., 9 S R
Arthur Ralph Thomas Hillebrand, Le Mars, Ia., 20 N Ed
Adam Miller Hiltebeitel, Green Lane, Pa., 63 U
Henry Hipple, Lock Haven, Pa., 29 Vandeventer Av.
William McMillan Hitchman, Mt. Pleasant, Pa., 2 N R
Edgar G. Holt, Lawrence, Mass., 18 N Ed
Franklin Ferguson Hopper, Eatontown, N. J., 5 S Ed
Frederick Eugene Hughes, Wilkes Barre, Pa., 7 N R
Rolland Thomson Hull, Newton, N. J., 47 Univ. Pl.
Byron Keyser Hunsberger, Pottstown, Pa., 27 William St.
Robert Andrew Hunter, Philadelphia, Pa., 60 Univ. Pl.
Baldwin Gwynne Huntington, Columbus, O., 31 Univ. Pl.
Harold Imbrie, New York City, 19 Univ. Pl.
John Parker Jackson, Washington, D. C., 16 Dickinson St.
Richard Mortimer Jesup, New York City, 19 Univ. Pl.
Charles Hodge Jones, Erie, Pa., 13 M D
Harvey Llewellyn Jones Baltimore, Md., 2 Stockton St.
Joseph Jones, Passaic, N. J., 28 Chambers St.
Edward Lawrence Katzenbach, Trenton, N. J., 11 Dickinson St.
John Prentice Kellogg, New York City, 138 Nassau St.

John B. Kelly, Washington, D. C., 192 Nassau St.
Norvell Brightwell Knight, Shelbyville, Ky., 6 E B
Roger Knox, Connellsville, Pa., 9 Park St.
John McGill Lane, Hagerstown, Md., 58 University Pl.
Carl Haynes Langenberg, St. Louis, Mo., 30 U
Harry Hill Langenberg, St. Louis, Mo., 41 Univ. Pl.
Roy Ten Broeck Langenberg, St. Louis Mo., 41 Univ. Pl.
George Haines Lathrope, Scranton, Pa., 18 N M R
Harry Ridgway Lathrope, Scranton, Pa., 3 N E
Henry Hughart Laughlin, Allegheny, Pa., 35 Univ. Pl.
Philip Le Boutillier, New York City, 19 Univ. Pl.
Charles Levy, Newark, N. J., 33 N Ed
Alfred Homes Lewis, Rye, N. Y., 27 Mercer St.
Francis Vernon Lloyd, Philadelphia, Pa., S, U
Samuel Negley Loose, Hagerstown, Md., 4 W M W
Howard McBride, Indianapolis, Ind., 300 H S
Samuel McDowell, Wyoming, Pa., 23 Edwards Pl.
William Carleton McKee, Blairsville, Pa., 1 S Ed
George Scott McKnight, Pittsburgh, Pa., 1 N E
Walter Percival Maguire, Huntingdon, Pa., 188 Nassau St.
James Maltman, Chicago, Ill., 2 Nassau St.
Dwight Willison Marvin, Germantown, Pa., 12 S E B
Harry Joseph Matthews, Cockeysville, Md., 82 Chambers St.
Edward Browning Meigs, Philadelphia, Pa., 39 Univ. Pl.
Charles Miller, Trenton, N. J., 1 N Ed
John Norris Miller, Washington, D. C., 10 S W B
Alfred Derby Mittendorf, New York City, 1 S D
James Hugh Fleming Moffatt, Cumberland, Md., 192 Nassau St.
Herbert Hill Moore, Pittsburgh, Pa., 10 S R
James Edgar Morris, New York City, 11 Dickinson St.
Chauncey Hulburt Murphey, Albany, N. Y., 36 Univ. Pl.
John Francis Neary, Wilmington, Del., 36 Univ. Pl.
George Harold O'Donnell, Newton, N. J., 6 S E B
Charles Luther Olds, Jr., Ft. Wayne, Ind., 148 Nassau St.
Charles Edwin Otis, Yonkers, N. Y., 6 E B
Arthur Poe, Baltimore, Md., 5 W M W
Paul Cheney Prentice, New York City, 18 S W
Donald Brown Stearns Rathbun, Hornellsville, N. Y., 24 Chambers St.

Robert Charlton Reading, 2nd,	Williamsport, Pa.,	29 Vandeventer Av.
Walter Powell Redington,	Washington, D. C.,	H, U
David Aiken Reed,	Pittsburg, Pa.,	47 Univ. Pl.
Gordon F. Roberts,	Brooklyn, N. Y.,	22 Dickinson St.
Harris Robinson,	Kansas City, Mo.,	18 N D
William McIlwain Robinson,	Buffalo, N. Y.,	12 W B
William Van Blarcom Rosenkrans,	Newton, N. J.,	7 S E B
George Ross,	Doylestown, Pa.,	53 Univ. Pl.
James B. Sansome,	Indiana, Pa.,	3 M D
Donald Corwin Scott,	Toledo, O.,	35 Univ. Pl.
Samuel Bryan Scott,	Allegheny, Pa.,	8 N E
Rowley Shepardson,	Richmond, Va.,	47 Univ. Pl.
Irvin Shupp, Jr.,	Philadelphia, Pa.,	18 S E
William Joseph Slidell,	New York City,	9–10 U
James Renwick Sloane,	Princeton, N. J.,	95 Bayard Av.
Algernon Taylor Smith,	Ocean, Md.,	192 Nassau St.
Charles Kerr Smith,	Pittston, Pa.,	7 N E
Louis Irvin Smith, Jr.,	Philadelphia, Pa.,	15 Dickinson St.
Thomas Jaeger Snyder,	Reading, Pa.,	45 Univ. Pl.
Horatio Nelson Spencer,	St. Louis, Mo.,	1 U
James Nevett Steele, Jr.,	New York City,	14 Edwards Pl.
Charles Herbert Stuart,	Logansport, Ind.,	53 Univ. Pl.
Homer White Taylor,	Pittsburgh, Pa.,	44 Vandeventer Ave.
Nelson Thomasson, Jr.,	Chicago, Ill.,	28 Pyne Building
Leh Roy Urban,	Woodbury, N. J.,	15 S Ed
William Van Buskirk,	Brooklyn, N. Y.,	82 Chambers St.
Frederick Oswin Waagé,	Pennsburg, Pa.,	62 U
Walter Hudson Watkins,	Chattanooga, Tenn.,	P, U
Herbert Wheeler,	Germantown, Pa.,	19 M D
James Addison White,	Coleraine, Pa.,	28 S Ed
John Van Buren Wicoff,	Plainsboro, N. J.,	20 N E
Thomas Ferdinand Wilcox,	New York City,	21 Dickinson St.
Richard Claggett Williams,	Baltimore, Md.,	14 N Ed
Preston Witherspoon,	Baltimore, Md.,	60 Univ. Pl.
Julius Francis Wolff,	Newark, N. J.,	33 N Ed
Albert Southard Wright,	Trenton, N. J.,	19 Alexander St.
Charles Yeomans,	Orange, N. J.,	53 Univ. Pl.
Harry Steele Zimmerman,	Penbrook, Pa.,	2 N Ed

FRESHMEN, ... 161

SPECIAL STUDENTS.

Victor Shaeffer Beam,	Intercourse, Pa.,	8 S Ed
Philip Edwin Brundage,	Stroudsburg, Pa.,	10 N
Frank Chew,	Xenia, O.,	14 E W
William Harper Davis,	Philadelphia, Pa.,	Wiggins St.
Frederick Albert Earls,	Salt Lake City, Utah,	21 N Ed
Gustav Eggena,	New Brighton, N. Y.,	14 S E
Frank Edgar Evans,	Milwaukee, Wis.,	88 U
Samuel Smallwood Feagles,	Minneapolis, Minn.,	88 S Ed
John Goldsbury,	Minneapolis, Minn.,	5 N M R
James Hayes, Jr.,	Plainfield, N. J.,	A, E B
Evan Edmund Jones,	Wilkes Barre, Pa.,	18 S E
Robert Ogilvie Kirkwood,	Yonkers, N. Y.,	20 E W
William Trowbridge Laing,	Princeton, N. J.,	19 N E
James Alexander McCague,	New York City,	130 Mercer St.
Frederic Hinton Maule,	Philadelphia, Pa.,	10 N D
John Norris Miller,	New York City,	10 S W B
Louis B. Milliken,	Warbly, Pa.,	7 N W
Craig Elder Nightingale,	New York City,	27 Chambers St.
Harry Parsons,	Williamsport, Pa.,	6 E M W
Oscar Bertram Riegel,	Orwigsburgh, Pa.,	7 N R
Van Dyck Rusling,	Paterson, N. J.,	18 N E
Robert Dalzell Schoonmaker,	Plainfield, N. J.,	10 S R
Herman Milton Suter,	Greensburg, Pa.,	9 N M R
John Stringer Tilney, Jr.,	New York City,	6 S E
Frederick Ridgely Torrence,	Oxford, O.,	22 N Ed
Preston Witherspoon,	Baltimore, Md.,	60 Univ. Pl.

ACADEMIC SPECIALS 26

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STUDENTS IN THE JOHN C. GREEN SCHOOL OF SCIENCE.

SCHOOL OF ELECTRICAL ENGINEERING.

SECOND YEAR.

Walter Raines Darby, A.B., Princeton, 1895.	Plainfield, N. J.,	8 S M R
James Edward Hayes, Jr., C.E., Princeton, 1895.	Brooklyn, N. Y.,	5 M D
Howard McClenahan, E.E., Princeton, 1895.	Port Deposit, Md.,	Ivy Club
Andrew Reid McNitt, A.B., Princeton, 1895.	Siglerville, Pa.,	11 N Ed
Anderson Offutt, B.S., Princeton, 1894.	Rockville, Md.,	5 N W
Frank Forrester Thompson, A.B., Princeton, 1891; A.M., 1895.	Milroy, Pa.,	11 N Ed
Robert Lansing Zabriskie, A.B., Princeton, 1895.	Aurora, N. Y.,	12 S E

FIRST YEAR.

Arthur Houston Brown, C.E., Princeton, 1896.	Des Moines, Ia.,	18 N
Everette Leute Greene, A.B., Princeton, 1893.	Coldspring, N. Y.,	9 N Ed
John Douglas Kilpatrick, C.E., Princeton, 1896.	Baltimore, Md.,	78 M W

STUDENTS IN THE ELECTRICAL SCHOOL, ... 10

SENIOR CLASS.

e Calvin Tomkins Allison,	Stony Point, N. Y.,	20 S W
a Owen Randolph Altman,	California, Pa.,	17 N Ed
a Harry Vanderburgh Babcock,	New York City,	12 S W
a Edward Duff Balken,	Pittsburgh, Pa.,	6 S W B

a Henderson Barkley,	New Orleans, La.,	7 W M W
a Paul Bedford,	Wilkes Barre, Pa.,	7 E W
a Burdette Leon Bowne,	Grand Rapids, Mich.,	L, U
a Carl Emerson Buckingham,	Longmont, Col.,	24 Mercer St.
e Robert Stuart Campbell,	Lancaster, Pa.,	89 S Ed
e John Simmons Collette,	Binghamton, N. Y.,	20 S E
e David Mahon Craig,	Washington, D. C.,	5 S W B
e John De Gray,	Hawthorne, N. J.,	8 M D
a Evaristo Visente de Montalvo,	New York City,	9 S E B
e Walter Shipman Ely,	Peekskill, N. Y.,	5 E M W
a Frank Evans,	Blairsville, Pa.,	8 M D
a George Ostrum Forbes,	Rockford, Ill.,	2 E B
a Robert Garrett,	Baltimore, Md.,	8 N D
a Nelson William Gillespie,	Scranton, Pa.,	22 M D
e Henry Alexander Harris,	Princeton, N. J.,	12 N W
a William Elliott Harrold,	Americus, Ga.,	1 M D
a Francis Reynolds Haussling,	Newark, N. J.,	6 N D
e John Harrison Hutchinson,	Georgetown, N. J.,	10 N R
e Thomas Hall Ingham,	Philadelphia, Pa.,	20 N W
a Albert Woodward Jamison,	Peoria, Ill.,	27 M D
a Herbert Brotherson Jamison,	Peoria, Ill.,	27 M D
e Phillips Jones,	Newark, N. J.,	4 W B
a Edward Gruet Kent,	East Orange, N. J.,	11 S M R
a Carlton Montgomery Kershow,	Philadelphia, Pa.,	16 E W
e William White Knapp,	Peekskill, N. Y.,	5 E M W
e Harry Wells Leigh,	Princeton, N. J.,	186 Nassau St.
e Robert Theodore Leipold,	Washington, D. C.,	15 S E
a Frederic Brownell McNish,	Cambridge, N. Y.,	14 S D
a James Henry Masson, Jr.,	Mobile, Ala.,	15 S D
e Edwin Moore,	Moore, Pa.,	9 W B
a Robert Moore,	Pittsburgh, Pa.,	10 S R
a Walter James Pilling,	Washington, D. C.,	11 W W
a Harry Curtis Robb,	Newark, N. J.,	15 M D
a Irving Livingston Roe,	New York City,	2 S E B
a Albert Huntsman Rosengarten,	Philadelphia, Pa.,	15 S D
a Joseph Wright Ryle,	Paterson, N. J.,	16 U
a Edwin Shortz, Jr.,	Wilkes Barre, Pa.,	8 W B
e Frederick Lorenzo Smith,	New York City,	1 E B
e Sydney Wentworth Taylor, Jr.,	Fort Riley, Kan.,	10 W B

a Leland Burr Terry,	Randolph, N. Y.,	8 N R
a John Myers Townley,	Kansas City, Mo.,	19 E W
a William Booth Trainer,	Chester, Pa.,	8 S W B
a Robert Crew Wilkins,	Washington, D. C.,	8 N R
e Herbert Roland Woodward,	Peoria, Ill.,	7 E B

SENIORS 48

JUNIOR CLASS.

a Houston Churchwell Armstrong,	Selma, Ala.,	11 N E
a Matthew Baird,	Merion Sta., Pa.,	85 Univ. Pl.
a Charles Preston Beistle,	Swarthmore, Pa.,	9 W B
a Ralph Waldo Beymer,	Corning, Ia.,	18 E W
a Moses Bigelow, Jr.,	Newark, N. J.,	8 E B
e George Harold Bouton,	Jersey City, N. J.,	6 N W
e Robert Stewart Brooks,	Paterson, N. J.,	29 S Ed
a George Elsworth Brower,	Brooklyn, N. Y.,	9 N D
a Thomas Townsend Buckley,	New York City,	Princeton Inn
e William Leigh Cook,	Princeton, N. J.,	Nassau Hotel
a Edward Payson Cooke,	Paterson, N. J.,	5 N R
a Oakley Watts Cooke,	Paterson, N. J.,	5 N R
a Roy Cummings Cooper,	Allegheny, Pa.,	12 E B
e Edward Parsons Davis,	New York City,	9 S E B
e Eugene Theodore DeWitt,	Deckertown, N. J.,	1 N D
a Philemon Dickinson,	Trenton, N. J.,	7 N D
a Bertrand Francis Drake,	Yalaha, Fla.,	B, U
a Holton Wesley Garner,	Ottumwa, Ia.,	10 N W
e Robert Galt Goldsborough,	Baltimore, Md.,	8 E M W
a Franz Carl Groos,	San Antonio, Tex.,	11 W B
a Richard George Hager,	St. Louis, Mo.,	15 N D
a Harrison Hall,	Dayton, O.,	18 N W
e Edward Creswell Heald,	Washington, D. C.,	5 S R
a Walter Richmond Herrick,	Albany, N. Y.,	10 E B
a James Rowland Hughes,	Richmond, Ind.,	18 M D
e John Updegraff Hussey,	Allegheny, Pa.,	9 M D
e Joseph Baldwin Hutchinson, Jr.,	Philadelphia, Pa.,	4 W W
a Addison Wiley Kelly,	New York City,	8 W M W
e Frank Weyman Kennedy,	Allegheny, Pa.,	9 M D
e Henry Hutton Kennedy, Jr.,	Philadelphia, Pa.,	2 S W B

a Robert Burns King,	Pittsburgh, Pa.,	16	S	E		
a Samuel Victor King,	Allegheny, Pa.,	12	S	W	B	
a Levin Dirickson Laning,	Petersburg, Ill.,	8	S	R		
e George Green Lewis,	Trenton, N. J.,	6	W	W		
a Milton Floyd Loofbourrow,	Mt. Sterling, O.,	6	N	M	R	
a George Henry McFarland, Jr.,	Cambridge, N. Y.,	1	S	R		
a Albert Elliot McVitty,	Bryn Mawr, Pa.,	2	W	M	W	
a Edward Quinby McVitty,	Bryn Mawr, Pa.,	7	S	D		
a Joseph Dennie Meredith,	Morristown, N. J.,	B, U				
a Clinton Vanderbilt Meserole,	Brooklyn, N. Y.,	26	M	D		
a Oliver Samuel Metzerott,	Washington, D. C.,	14	M	D		
a Charles Monroe Murray,	Albany, Tex.,	12	Edwards Pl.			
a George McCague Newmyer,	Pittsburgh, Pa.,	206	Nassau St.			
a John Reid Parker,	Freehold, N. J.,	8	S	M	R	
e William Joseph Parker,	Trenton, N. J.,	10	N	R		
a Edward Franklin Pelton,	Brooklyn, N. Y.,	11	S	E	B	
e Robert Pitcairn, Jr.,	Pittsburgh, Pa.,	2	E	B		
a Charles Morgan Post,	Brooklyn, N. Y.,	11	S	E	B	
a Harry Clay Potter, Jr.,	Philadelphia, Pa.,	5	N	W	B	
a Frank Ferry Powell,	Cincinnati, O.,	10	N	W		
e Seth Jagger Raynor,	Southampton, N. Y.,	6	S	W		
a William McKendree Scott,	Allegheny, Pa.,	8	N	E		
a Howard Eves Seaver,	Philadelphia, Pa.,	2	W	B		
e Lansing Skimmerhorn Seymour,	Pittsburgh, Pa.,	16	S	E		
a Archer Coit Sinclair,	New York City,	12	S	E	B	
e Thomas Julien Skillman,	Trenton, N. J.,	6	S	W		
a Richard Lawrence Smith,	New York City,	1	E	W		
a William Hair Spurgin,	West Point, N. Y.,	F,	W	B		
a Paul Devereux Stockly,	Lakewood, N. J.,	2	S	E	B	
a Raymond Boyd Thompson,	New York City,	9	W	M	W	
a Charles Tilden Westcott,	Chestertown, Md.,	9	N	E		
a Edward Frederick Wetzel,	Oak Park, Ill.,	11	N	E		
a Lewis Noble Wiggins,	Springfield, Ill.,	8	S	R		
e Ernest Wyckoff,	Hightstown, N. J.,	2	S	M	R	

JUNIORS, ... 64

SOPHOMORE CLASS.

e Louis Robert Albright,	Allentown, Pa.,	17	W	W		
e Eugene Yorke Allen,	South Orange, N. J.,	9	E	M	W	

a Bruce Bedford, Wilkes Barre, Pa., 8 W B
a Edwin North Benson, Jr., Philadelphia, Pa., 7 N D
a Walter Murray Brenner, Dayton, O., 10 E W
e Adelbert Emmons Bronson, Jr., Cleveland, O., 17 U
a George Howard Butler, Brooklyn, N. Y., 26 M D
a Raymond Hastings Alleyne Carter, Montclair, N. J., 22 Stockton St.
a Howard Gould Chatfield, Seabright, N. J., 6 S W
a Edwin Truesdell Clark, Dayton, O., 10 E B
e Garrett Cochran, Williamsport, Pa., 3 E M W
a George Leonard Collard, Pittsburgh, Pa., 6 M D
e Albert Emerson Comstock, White Plains, N. Y., 6 S W
a David Shields Cook, Jr., Evanston, Ill., 39–40 U
a Raymond Scudder Cook, Lawrenceville, N. J., 2 W W
e Bryant Sterling Daniels, Covington, Ky., 16 S W
a Robert Stewart Davis, Milton, Pa., 14 Vandeventer Av.
e William Henry Detrich, Markes, Pa., 18 N E
a Keith Donaldson, Philadelphia, Pa., 7 U
a Frank Parker Ekings, Paterson, N. J., 47 U
a Robert Potter Elmer, Bridgeton, N. J., 4 N M R
e John Andrews Ely, Jr., New York City, 19 U
a Harry Griest Euwer, New Castle, Pa., 9 S E
a Richard Hanenkamp Fallon, Chicago, Ill., 60 U
a Mortimer Bartine Fuller, Scranton, Pa., 12 M D
e Thomas Franklin Galt, St. Louis, Mo., 1 U
a Francis Colquhoun Goldsborough, Baltimore, Md., 8 E M W
a Frank Duncan Graham, Seabright, N. J., T, U
a Charles Black Gray, Wilmington, Del., 12 S W B
a Chester Griswold, Jr., New York City., 7 U
a Bryan Chedister Guerin, Morristown, N. J., 10 W M W
a Leonard Kent Guiler, Pittsburgh, Pa., 19 N W
a Dwight Story Harding, Evanston, Ill., 10 S D
a Charles Albert Hatch, Stamford, Conn., F, U
a Ralph Woodward Hayden, Evanston, Ill., 39–40 U
e Sterling Paine Hayward, Yonkers, N. Y., 14 M D
e Franklin Milo Hill, Princeton, N. J., Infirmary
a Henry F. Askew Jackson, Wilmington, Del., 10 N M R
a Livingston Erringer Jones, Germantown, Pa., 112 Nassau St.
e Murray Frederic Kelley, Racine, Wis., D, U

a George Knowles Large,	Flemington, N. J.,	20	U
e Howard Logan,	Springfield, Ill.,	8 N	E
a James Nance McCaughrin,	Newberry, S. C.,	30	U
e John Thompson McKennan,	Pittsburgh, Pa.,	7 N M	R
a Guy Boutwell McKinney,	St. Joseph, Mo.,	18 S M	R
a Edward Charles McWilliams,	Wilkes Barre, Pa.,	88 Nassau St.	
a Samuel Klump Martin, Jr.,	Chicago, Ill.,	75–76	U
e James Bennett Milliken,	Pottsville, Pa.,	11–12	U
e Edward Sewall Mitchell,	Glen Ridge, N. J.,	41–42	U
a Mark Moody,	Webster Groves, Mo.,	12 Vandeventer Av.	
e William Thompson Morgan,	Trenton, N. J.		
a Malcolm Stewart Murray,	Saltsburg, Pa.,	4 N	E
e Edgar West Nicholson,	Philadelphia, Pa.,	41–42	U
e James Caldwell Park,	Cranford, N. J.,	11 S	W
a Henry Hildreth Pease,	Wilkes Barre, Pa.,	12 M	D
a Bishop Chapin Perkins,	Washington, D. C.,	4 E M	W
a John Harris Briggs Phillips,	Allegheny, Pa.,	18	U
e Frank Russel Pitcairn,	Harrisburg, Pa.,	7 W	B
a William Dixon Quackenbush,	Paterson, N. J.,	47	U
a Thomas William Roberts,	Bala, Pa.,	11 S	D
e Louis Adams Robb,	Newark, N. J.,	15 M	D
a Ralph Root,	East Orange, N. J.,	37 Univ. Pl.	
a Frederic Rosengarten,	Philadelphia, Pa.,	7	U
a Archibald Hamilton Rowan,	Irvington, N. Y.,	60	U
e Fred Wesley Salmon,	Mt. Olive, N. J.,	78 Univ. Pl.	
e William Bernard Schwarz,	Baltimore, Md.,	8 E M	W
a William Parr Scott,	Germantown, Pa.,	49	U
e Ralph Wilson Simonds,	Newark, N. J.,	2 N	E
a Burrows Sloan,	Philadelphia, Pa.,	23 M	D
a Frank Lawrence Stratton,	New York City,	60–61	U
a Harry Street,	Brooklyn, N. Y.,	14 M	D
e Raleigh Colston Thomas,	Baltimore, Md.,	4 W	W
a Andrew Thompson,	Albany, N. Y.,	10 E	B
a William Whitehead Titus,	Trenton, N. J.,	11 N	D
e Herbert Norris Twells,	Woodbury, N. J.,	V,	U
a William Leigh Ulyat,	Princeton, N. J.,	93 Alexander St.	
a Walter Lyman Upson,	Cleveland, O.,	15 N M	R
a Francis King Wainwright,	Philadelphia, Pa.,	12 S E	B
a Wilmer Waldo,	Houston, Tex.,	R,	U

e Carroll Blanchard McCulloh, Fort Assiniboine, Mont., 33 Vandeventer Ave.
a Walter Irving Martin, Chicago, Ill., 76 U
a William Johnston Metzger, Latrobe, Pa., 78 Univ. Pl.
a Arthur Herbert Mitchell, East Orange, N. J., 172 Nassau St.
a Worrall Frederick Mountain, East Orange, N. J., 64 Univ. Pl.
e Newton Smith Noble, Morristown, N. J., 11 Dickinson St.
a John Francis Neary, Princeton, N. J., 86 Univ. Pl.
a George Duhring Oberteuffer, Wynnewood, Pa., 11 Dickinson St.
a Robert Oglesby, Chester, Pa., 11 E W
a Ward Coe Pitkin, Yonkers, N. Y., 3 W B
e Ralph Hutchinson Poole, Chicago, Ill., 24 Pyne Building
a Morgan Bulkley Post, Brooklyn, N. Y., 11 S E B
a William Muzzey Powel, Chester, Pa., 64 U
a Edwin Stanton Prieth, Newark, N. J., 24 S Ed
e John Vermilye Redfield, Hartford, Conn., 20 Pyne Building
e Lewis Robert Reid, Detroit, Mich., 173 Nassau St.
a Frank Mauran Rhodes, Ardmore, Pa., 16 W W
a Alexander Blaine Robinson, Allegheny, Pa., 84 Vandev'ter Ave.
a Edmund Cook Sargeant, Newark, N. J., 9 Park St.
a George Plumer Schmidt, Princeton, N. J., 244 Nassau St.
a Jerome Archibald Schultz, Chicago, Ill., 40 Wiggins St.
a Thomas Steel Schultz, Pittsburgh, Pa., 43 Vandeventer Ave.
a Fred Hossack Scott, Evanston, Ill., 43 Vandeventer Ave.
a John Semple Sharpe, Philadelphia, Pa., 33 S Ed
a John Knox Sibbett, Princeton, N. J.
a George Joseph Siedler, Morristown, N. J., 148 Nassau St.
a Samuel Smallwood Teagles, Minneapolis, Minn., 38 S Ed
a Alexander Nisbet Turnbull, Jr., Baltimore, Md., 16 M D
e Stephen Francis Voorhees, Rocky Hill, N. J., 146 Nassau St.
e Henry Elliot Waggaman, Washington, D. C., 19 Vandeventer Ave.
a Samuel Stockton White, 3rd, Germantown, Pa., 34 N Ed
e William Dodd Williger od, E. Orange, N. J., 172 Nassau St.
a John Scott Willock, Allegheny, Pa., 68 Nassau St.
a Webster Withers, Jr., Kansas City, Mo., 1 S E
e Harold Roome Woodruff, Brooklyn, N. Y., 24 Chambers St.
a Frank Dohrmann Yuengling, Pottsville, Pa., 81 Univ. Pl.

FRESHMEN, ... 101

SPECIAL STUDENTS.

James Belmont Allen,	Kansas City, Mo.,	19 E W
Abram Crittenden Ayres,	New York City,	6 W M W
William Heath Bannard,	Long Branch, N. J.,	8 E M W
Frank Bannerman, Jr.,	Brooklyn, N. Y.,	8 S E B
Howard Beattie,	Little Falls, N. J.,	3 E B
Henry Clayton Blackwell,	Trenton, N. J.,	8 E B
Parker Johnson Boice,	Indianapolis, Ind.,	18 N D
William Erasmus Bottger,	Utica, N. Y.,	25 S Ed
Edward Allen Breck,	Pittsburgh, Pa.,	88 Nassau St.
John Van Burton,	Batavia, Ill.,	
Stewart Fellowes Campbell,	Glen Ridge, N. J.,	10 S W
Harold Whitney Canning,	Wilmington, Del.,	8 W B
Perry Craig,	Erie, Pa.,	28 N Ed
John Francis Cregan,	Schenectady, N. Y.,	21 S Ed
Ralph Langstaff Crow,	New York City,	86 Univ. Pl.
Murray Greene Day,	Morristown, N. J.,	16 S W
Ralph Vance Dickerman,	Springfield, Ill.,	15 N D
John Thomas Dunlop,	Washington, D. C.,	4 S W B
Roswell Frank Easton,	Princeton, N. J.,	47 Univ. Pl.
John Orville Ecker,	Washington, D. C.,	15 Univ Pl.
Grant Henry Fairbanks,	Joplin, Mo.,	6 W B
Albert Cooley Fulton,	Elmira, N. Y.,	17 S M R
Charles Lawrence Garner,	Ottumwa, Ia,	26 Edwards Pl.
George James Geer, Jr.,	Summit, N. J.,	4 W M W
James Williams Gidley,	Whitewood, S. Dak.,	18 N
Ferdinand Johnson Graves,	Germantown, Pa.,	5 E B
John Leigh Green,	St. Louis, Mo.,	9 S W B
Arthur Herbert Hagemeyer,	S. Orange, N. J.,	16 W W
Alfred Hamburger,	Allegheny, Pa.,	3 E B
Harry Maybin Hart,	Philadelphia, Pa.,	7 S D
Colton Allen Hayden,	New York City,	22 Dickinson St.
Charles Herndon,	Tyler, Tex.,	9 W W
Isaac Harrison Hutchinson,	Georgetown, N. J.,	10 N R
Richard Howard Jamison,	Greensburg, Pa.,	9 W M W
Henry Neff Kehler, Jr.,	Columbia, Pa.,	8 S W B
Richard Browning Kent,	Jersey City, N. J.,	10 W B
Charles Henry Kilpatrick,	Albany, N. Y.,	21 S E

Lewis Knapp,	St. Louis, Mo.,	21 M D
William Wallace Leggett,	Princeton, N. J.,	89 William St.
Henry Wheeler Lowe,	Plainfield, N. J.,	5 M D
Walter McClenahan,	Port Deposit, Md.,	2 W M W
Duncan Macphee,	Trenton, N. J.,	10 N Ed
Andrew Mills, Jr.,	New York City,	7 S W B
Robert Westcott Moore,	New York City,	15 Dickin'n St.
Dudley Burnham Munger,	Kansas City, Mo.,	12 E B
Lew Russell Palmer,	Imogene, Ia.,	20 N Ed
Schuyler Howard Park,	Cranford, N. J.,	11 S W
Frank DeWitt Pitkin,	Yonkers, N. Y.,	3 W B
Herbert LeRoy Pitkin,	Englewood, N. J.,	23 M D
Neilson Poe, Jr.,	Baltimore, Md.,	5 W M W
Arthur Pomeroy,	Cleveland, O.,	17 U
Carl Hamilton Rickey,	Trenton, N. J.,	11 N D
Leonard Harman Robbins,	Lincoln, Neb.,	11 N M R
Lee Moses Rumsey,	St. Louis, Mo.,	3 N D
Joseph Isadore Saks,	Washington, D. C.,	15 Univ. Pl.
Ira Allan Sankey,	Brooklyn, N. Y.,	14 S W
Eads Everhard Schmidt,	Princeton, N. J.,	294 Nassau St.
George Cole Scott,	Richmond, Va.,	1 S W
Harold Perry Smith,	Nyack, N. Y.,	3 W M W
Alexander Mead Stewart, Jr.,	Indiana, Pa.,	2 N R H
Lawrence Turnbull, Jr.,	Baltimore, Md.,	16 M D
John Stout Van Nest,	Trenton, N. J.,	7 N E
Robert Weber,	New York City,	6 W M W
John Gerion Westcott,	Chestertown, Md.,	9 N E
Burnett Foster Wilkinson,	Newark, N. J.,	138 Nassau St.
Benjamin Gardner Wilson,	Clarion, Pa.,	8 W M W
Walter Winfield Wilson,	Clarion, Pa.,	8 W M W

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CLASSIFICATION OF STUDENTS BY RESIDENCE.

Pennsylvania	297	California	2
New Jersey	233	Mississippi	2
New York	171	North Dakota	2
Maryland	41	Oregon	2
Ohio	40	South Dakota	2
Illinois	39	Utah	2
District of Columbia	30	Vermont	2
Missouri	26	Arizona	1
Kentucky	15	Arkansas	1
Iowa	14	Florida	1
Delaware	11	Indian Territory	1
Indiana	11	Louisiana	1
Connecticut	8	Montana	1
Michigan	8	North Carolina	1
Minnesota	7	West Virginia	1
Texas	7		
Kansas	6	Canada	6
Tennessee	6	Ireland	3
Virginia	6	Syria	3
Alabama	5	India	2
South Carolina	5	British Columbia	1
Georgia	4	Ceylon	1
Massachusetts	4	China	1
Nebraska	4	England	1
Colorado	3	Persia	1
Wisconsin	3		
			1045

ABBREVIATIONS.

N, Nassau Hall.
N E, North Entry of East College.
S E, South Entry of East College.
N W, North Entry of West College.
S W, South Entry of West College.
N R, North Entry of Reunion Hall.
S R, South Entry of Reunion Hall.
N M R, North Middle Entry of Reunion Hall.
S M R, South Middle Entry of Reunion Hall.
E W, East Entry of Witherspoon Hall.
W W, West Entry of Witherspoon Hall.
E M W, East Middle Entry of Witherspoon Hall.
W M W, West Middle Entry of Witherspoon Hall.
N Ed, North Entry of Edwards Hall.
S Ed, South Entry of Edwards Hall.
U, University Hall.
N D, North Entry of Albert B. Dod Hall.
M D, Middle Entry of Albert B. Dod Hall.
S D, South Entry of Albert B. Dod Hall.
E B, East Entry of David Brown Hall.
W B, West Entry of David Brown Hall.
S E B, South East Entry of David Brown Hall.
S W B, South West Entry of David Brown Hall.
A S, Alexander Hall, Seminary.
B S, Brown Hall, Seminary.
H S, Hodge Hall, Seminary.

HONORS AND DEGREES CONFERRED.

DEGREES.

DEGREES IN COURSE, CONFERRED NOVEMBER, 1895.

MASTERS OF ARTS (*A.M.*).....5.

Hon. Jacob Scudder Galloway, '58.
John W. Mayhew, M.D., '92.
Prof. Walter L. Wright, '92.
Herbert S. Carter, M.D., '92.
Charles W. Somerby, LL.B., '92.

HONORARY DEGREES, CONFERRED FEBRUARY, 1896.

A.M.—John B. Jackson, Berlin.

DEGREES IN COURSE, CONFERRED FEBRUARY, 1896.

Ph.D.—Jacob Poppen, Kalamazoo College.

HONORARY DEGREES, CONFERRED JUNE, 1896.

LL.D. —His Excellency John W. Griggs, Governor of the State of New Jersey.
L.H.D.—George William Sheldon, '68.
Ph.D. —Prof. Andrew Campbell Armstrong, '81.
A.M. —William Nelson.

DEGREES IN COURSE, CONFERRED JUNE, 1896.

DOCTORS OF PHILOSOPHY (*Ph.D.*)..... 3.

Frank Allan Waterman, '88,
Max Farrand, '92,
Alvin Davison, *Nat. Col. of Ohio.*

DOCTORS OF SCIENCE (*D.Sc.*).....2.

Marcus Stults Farr, '92,
George Irving Adams, *Univ. of Kan. '94.*

MASTERS OF ARTS (*A.M.*)..... 38.

William Paul Armstrong, '94,
William Osborn Baker, '93,
Ernest Ludlow Bogart, '90,
Howard Doty Carpenter, '95,
Jesse Benedict Carter, '93,
Parke Hill Davis, '93,
Samuel Dickey, '94,
Jay Falconer Ewing, '93,
Cleveland Frame, '94,
Louis Clayton Woodruff, '95,
Paul Griswold Huston, '95,
Robert Bonner Jack, '94,
Ernest Farwell Keigwin, '94,
Charles Frederick Morrison, '94,
Clifford McBride, '94,
John W. Nicely, '93,
George Madison Priest, '94,
Francis Speir, Jr., '77,
John W. Featherer Wilkinson, '93,
Henry Coleman Baskerville, *Univ. of Ga.*, 1868.
James Alexander Clarke, *Lafayette.*
Leonard Colyn, *Grand Rapids College*, 1892.
William Foster, Jr., *Hartford College*, 1892.
George Fulton, *Centre College.*
Robert Reed Gailey, *Lafayette*, 1893.
John Archibald McKee, *Wabash*, 1894.
Harvey Nowland Mount, *Wabash*, 1894.
Dwight Elwood Potter, *Univ. of Kan.*, 1892.
Samuel Dobbins Price, *Univ. of City of New York*, 1893.
Charles Manville Pratt, '79,
Claude Milton Thomas, '84,
John Cass Mathis, '86,
David Meriwether Milton, '86,
Junius S. Morgan, '88,
Albert Frost Earnshaw, '92,
John Tatham Dunn, '92,
Henry Ewing Hale, Jr., '92,
William Updike Vreeland, '92.

MASTERS OF SCIENCE (*M.S.*).....5.

James Purviance Atkinson, '92,
Ulric Dahlgren, '94,
Legh Wilbur Reed, *Johns Hopkins Univ.*
Frederick Clark Paulmier, '94,
Herbert Fowler Sill, '94,

BACHELORS OF ARTS (*A.B.*).....162.

David Paul Burleigh Conkling, as of the Class of 1894.

Francis Olcott Allen, Jr.,	Philadelphia, Pa.
Henry Beard Armes,	Washington, D. C.
William Mayo Atkinson,	Elizabeth, N. J.
Frank Allen Baker,	Philadelphia, Pa.

Mason Brown Barret,	Frankfort, Ky.
Jacob Newton Beam,	Intercourse, Pa.
Andrew Jefferson Berry,	Augusta, Ga.
Edward Hodge Bishop,	East Orange, N. J.
Charles Byron Bostwick,	New York City.
Laurance Foster Bower,	Pittsburgh, Pa.
Carl Miner Bowman,	Philadelphia, Pa.
Robert Walter Brace,	Blackwood, N. J.
Edward Swayne Brearley,	Lawrenceville, N. J.
Charles Oscar Bressler,	Lebanon, Pa.
Milner Brien,	Dayton, O.
Henry Clay Briggs,	Brooklyn, N. Y.
Edwin Henry Bronson,	Philadelphia, Pa.
Macy Brooks,	Philadelphia, Pa.
Charles Browne,	Philadelphia, Pa.
Henry Munro Bruen,	Belvidere, N. J.
James Bayley Bruen,	Belvidere, N. J.
Sydney Serrill Bunting,	Philadelphia, Pa.
Thomas Cadwalader,	Philadelphia, Pa.
Pierce Annesley Chamberlain,	Bahia, Brazil.
Philip Hudson Churchman,	Burlington, N. J.
Brutus Junius Clay, Jr.,	Paris, Ky.
James Blair Cochran,	Morristown, N. J.
Theodore Clifford Coe,	Newark, N. J.
Henry Welty Coulter,	Greensburg, Pa.
Josiah Hughes Crawford,	Philadelphia, Pa.
Mordecai Jackson Crispin,	Berwick, Pa.
Frank Linley Critchlow,	Manchester, Eng.
Benjamin Dangerfield, Jr.,	Pittsburgh, Pa.
Samuel Boyer Davis,	Philadelphia, Pa.
John Ross Delafield,	New York City.
Alfred Lewis Pinneo Dennis,	New York City.
Edward Lewis Dodd,	Orange, N. J.
Alfred Abel Doolittle,	Hang Chow, China.
William Furman Doty,	Washington, D. C.
Alexander Nelson Easton,	Summit, N. J.
David Farragut Edwards,	Jersey City, N. J.
James Johnston Elliott,	Murfreesboro, Tenn.
John Pinney Erdman,	Morristown, N. J.

Charles Milton Evans,	Towanda, Pa.
David Fentress,	Chicago, Ill.
William Alexander Fisher, Jr.,	Baltimore, Md.
Alexander Robert Fordyce, Jr.,	Newark, N. J.
John Calvin French, Jr.,	Prosperity, Pa.
Thomas Galt, Jr.,	Aurora, Ill.
Nelson Burr Gaskill,	Mt. Holly, N. J.
Thomas Logan Gaskill,	Mt. Holly, N. J.
John Randolph Graham,	Winchester, Va.
Eugene Gray,	Columbus, O.
Louis Herbert Gray,	Newark, N. J.
Meldrum Gray,	Columbus, O.
Woodward Keeling Greene,	Cedar Rapids, Ia.
Warren Jackson Haines,	Elkton, Md.
Benjamin Schuyler Halsey,	North Paterson, N. J.
Edward William Hamilton,	New York City.
George Gordon Hammill,	New York City.
Edward Blanchard Hodge, Jr.,	Burlington, N. J.
Frederick Evans Hoffman,	Fort Wayne, Ind.
Alfred Muirheid Howell,	Cogan Station, Pa
Augustine Leftwich Humes,	Knoxville, Tenn.
Alexander Jackson,	Berwick, Pa.
William Herron Jamison,	Allegheny, Pa.
Archibald Todd Johnson,	Philadelphia, Pa.
Clarence Melville Johnson,	Washington, D. C.
Gordon Johnston,	Birmingham, Ala.
John Campbell Kerr,	Englewood, N. J.
Alfred Gedney Killmer,	Bound Brook, N. J.
Leroy Kirkman,	Port Jervis, N. Y.
James Carnahan Knight,	Chicago, Ill.
Robert Ryland Knight,	Shelbyville, Ky.
William Edmund Lampe,	Frederick, Md.
LeRoy Porter Leas,	Philadelphia, Pa.
William Wirt Leonard,	Salisbury, Md.
Robert Lincoln Litch,	Bethlehem, Pa.
Robert Forsyth Little, Jr.,	New York City.
Frederick William Loetscher,	Dubuque, Ia.
Joseph Mackey Roseberry Long,	Bangor, Pa.
John Hancock Louser,	Lebanon, Pa.

Albert Howe Lybyer,	Brazil, Ind.
Francis Charles McDonald,	Mt. Union, Pa.
Robert McNutt McElroy,	Lebanon, Mo.
Scott McLanahan,	Chambersburg, Pa.
Wallace Donald McLean,	Washington, D. C.
Charles Bell McMullen,	Tarkio, Mo.
Benjamin Allen Masson,	Albia, Ia.
William Arnot Mather,	New York City.
William Francis Mattingly, Jr.,	Washington, D. C.
Robert Maxwell,	East Greenwich, N. Y.
Albert Goodsell Milbank,	New York City.
Samuel Wilson Miller, Jr.,	Saltsburg, Pa.
Edward Kirkpatrick Mills,	Morristown, N. J.
Frederic Livingstone Mills,	Jamaica, N. Y.
George Franklin Moll,	Highland, Kan.
John James Moment,	Orono, Ont.
Harry Morgan Moore,	California, Mo.
Minot Canfield Morgan,	Remsenburg, N. Y.
Roland Sletor Morris,	San Rafael, Cal.
Frederick Pooley Mudge,	Princeton, N. J.
William Henry Musser,	Harrisburg, Pa.
Joseph Laurence Myers,	Princeton, N. J.
William Vastine Oglesby,	Danville, Pa.
Frank Clifford Okey,	Corning, Ia.
Willette Bronson Orr,	Chambersburg, Pa.
Singleton Peabody Outhwaite,	Washington, D. C.
John Rosseel Overton,	Towanda, Pa.
David Park,	Corinth, Miss.
Charles Edgar Patton,	Warriors Mark, Pa.
Robert Hunter Patton, 2d,	Princeton, N. J.
Frederick Marshall Paul,	New Brunswick, N. J.
Ralph Barton Perry,	New York City.
Harry Gordon Pierce,	Wayland, N. Y.
Talbot Eugene Pierce,	Washington, D. C.
David Potter,	Bridgeton, N. J.
John Albert Potter,	Franklin, N. Y.
Stanley Chester Reese,	Pittsburgh, Pa.
Joseph Cottrell Righter, Jr.,	Williamsport, Pa.
Samuel Gayle Riley,	Georgetown, Ky.

Joseph George Rosengarten, Jr., Philadelphia, Pa.
Frederick Tupper Saussy, Savannah, Ga.
John Hinsdale Scheide, Titusville, Pa.
John Charles Sherriff, Allegheny City, Pa.
William Duncan Silkworth, Fishkill, N. Y.
James Dunn Small, Baltimore, Md.
Ralph Brown Smith, Blairsville, Pa.
Francis Sydney Smithers, Jr., New York City.
Homer Clay Snitcher, Greenwich, N. J.
William Francis Mattingly Sowers, Washington, D. C.
Samuel Robert Spriggs, Livingston Manor, N. Y.
Thomas Henry Atherton Stites, Wyoming, Pa.
William LeRoy Stockton, Princeton, N. J.
Joseph Herbert Stopp, Allentown, Pa.
William Paton Thomson, Altoona, Pa.
Paul Tillinghast, Englewood, N. J.
Warren Merwin Tower, Brooklyn, N. Y.
John Moore Trout, Bridgeville, Del.
Edward Bates Turner, Corning, Ia.
Ralph Ernest Urban, Dunmore, Pa.
Herbert Ure, Newark, N. J.
Frank Phineas Van Syckel, Elberon, N. J.
Edwards Pierrepont Ward, Dansville, N. Y.
Frank Hawley Ward, Rochester, N. Y.
Dorr Eugene Warner, Unionville, O.
John Waterhouse, Honolulu, Hawaiian Is.
George Henry Waters, Peekskill, N. Y.
Leon Joseph Wayave, Jr., Corning, N. Y.
Paul Charles Weed, St. Paul, Minn.
Thomas Youngs Wickham, Ainsworth, Ia.
Charles Frederick Williams, New York City.
Curtis Moore Willock, Allegheny, Pa.
Charles Alexander Wilson, Tarkio, Mo.
William Rolla Wilson, Denver, Col.
Charles Wesley Wisner, Jr., Baltimore, Md.
Charles Ladd Woodburn, Towanda, Pa.
Edward Strong Worcester, Burlington, Vt.
Willard Jurey Wright, Lebanon, O.
Philip Walter Yarrow, Lowell, Mass.
Jesse Reinhard Zeigler, Mercer, Pa.

ELECTRICAL ENGINEERS (*E.E.*).....1.

James Drake Black,	New York City.

BACHELORS OF SCIENCE (*B.S.*)..... 81.

Bernard Shea Horne, as of the Class of 1890.
Henry Clay Munger, as of the Class of 1884.

Hugh Wilson Barnett,	Springfield, O.
William Bush,	Wilmington, Del.
Roderick Byington, Jr.,	Brooklyn, N. Y.
Walter Chandler, Jr.,	Elizabeth, N. J.
Logan Coleman,	Springfield, Ill.
George Goodwin Dewey,	Portsmouth, N. H.
William Sutton Dickson,	Pittsburgh, Pa.
Emory Leyden Ford,	Allegheny, Pa.
Edwin Wilson Hammett,	Germantown, Pa.
William Prettyman Hearn,	Philadelphia, Pa.
Percy Ogden Judson,	East Arlington, Vt.
Edwin Edward Kurtzeborn,	St. Louis, Mo.
Frederick Curwen Leas,	Philadelphia, Pa.
Welding Dennis Libbey,	New York City.
George Wood Lyon,	Bridgeton, N. J.
Charles Ingalls Marvin,	Germantown, Pa.
Harold Byron Northrup,	Johnstown, N. Y.
Frederick Dalton Parker,	Fostoria, O.
William Bowne Parsons,	Flushing, N. Y.
Arthur Edmund Pew,	Pittsburgh, Pa.
William Woodburn Potter,	Philadelphia, Pa.
Algernon Brooke Roberts,	Bala, Pa.
Robert Sinclaire Rodgers,	Springfield, O.
Henry Welsh Rogers,	Philadelphia, Pa.
Ralph Dusenbury Smith,	Binghamton, N. Y.
George Dawes Van Arsdale,	Newark, N. J.
Arthur Ledlie Wheeler,	Philadelphia, Pa.
Charles Hallock Whitehead,	Kansas City, Mo.
Arthur Edward Winter,	Orange, N. J.

CIVIL ENGINEERS (*C.E.*).....15.

George Klotz Allen, Jr.,	Red Bank, N. J.
George Glover Blackmore,	Cincinnati, O.

Edgar Thomas Blackwell,	Hopewell, N. J.
Arthur Houston Brown,	Des Moines, Ia.
John Hanlon,	Brooklyn, N. Y.
William Frederick Hencken,	Newark, N. J.
Christian Stanger Heritage,	Glassboro, N. J.
John Douglas Kilpatrick,	Baltimore, Md.
William Thomas Lyle,	Newark, N. J.
William Galbraith Mitchell,	Washington, D. C.
Albert Irving Payne,	Sayville, N. Y.
William Belden Reed, Jr.,	New York City.
George Rosengarten Sinnickson,	Philadelphia, Pa.
Lloyd Llewellyn Smith,	Asbury, N. J.
Francis Gray Stewart,	New York City.

HONORARY DEGREES CONFERRED AT THE SESQUI-CENTENNIAL CELEBRATION, OCTOBER 22, 1896.

D.D. —Reverend Professor Willis Judson Beecher, Auburn Theological Seminary, Auburn, N. Y.

The Reverend Professor William Caven, Principal of Knox College, Toronto, and Professor of Exegetics and Biblical Criticism, Toronto, Canada.

Reverend Doctor Morgan Dix, Rector of Trinity Church, New York City.

The Reverend Professor George Park Fisher, Titus Street Professor of Ecclesiastical History and Dean of the Divinity School in Yale University, New Haven, Ct.

The Reverend Doctor William Reed Huntington, Grace Church, New York City.

Bishop John Fletcher Hurst, Chancellor of the American University, Washington, D. C.

The Reverend Professor Charles Marsh Mead, Riley Professor of Christian Theology in the Hartford Theological Seminary.

The Reverend Doctor Simon John McPherson, Chicago, Ill.

The Reverend Doctor Samuel Jack Niccolls, Pastor Second Presbyterian Church, Saint Louis, Mo.

The Reverend Professor Matthew Brown Riddle, Memorial Professor of New Testament Literature and

Exegesis in the Western Theological Seminary, Pittsburgh, Pa.

The Right Rev. Henry Yates Satterlee, Bishop of Washington, D. C.

The Reverend Doctor Joseph Tate Smith, Baltimore, Md.

The Reverend Professor Augustus Hopkins Strong, President of Rochester Theological Seminary and Davies Professor of Biblical Theology.

The Reverend Professor Joseph Henry Thayer, Bussey Professor of New Testament Criticism and Interpretation in Harvard University, Cambridge, Mass.

LL.D. —James B. Angell, President of the University of Michigan, Ann Arbor, Mich.

Maurice Bloomfield, Professor of Sanskrit and Comparative Philology in the Johns Hopkins University, Baltimore, Md.

Karl Brugman, Professor of Indogermanic Philology in the University of Leipzig, Germany.

John Bates Clark, Professor of Political Economy in Columbia University, New York City.

Johannes Conrad, Professor of Political Economy in the University of Halle, Halle, Germany.

Wilhelm Dörpfeld, First Secretary of the German Archæological Institute, Athens, Greece.

Edward Dowden, Professor of Rhetoric and English Literature in Trinity College, Dublin, Ireland.

Josiah Willard Gibbs, Professor of Mathematical Physics in Yale University, New Haven, Ct.

Daniel Coit Gilman, President of the Johns Hopkins University, Baltimore, Md.

George Lincoln Goodale, Fisher Professor of Natural History and Director of the Botanical Garden in Harvard University, Cambridge, Mass.

William Gardner Hale, Professor of Latin in the University of Chicago, Chicago, Ill.

The Hon. William Torrey Harris, United States Commissioner of Education, Washington, D. C.

Charles Custis Harrison, Provost of the University of Pennsylvania, Philadelphia, Pa.

George William Hill, Mathematician, Member of the National Academy of Sciences, Foreign Associate of the Royal Astronomical Society, W. Nyack, N. Y.

Arnold Ambrosius Willem Hubrecht, Professor of Zoology in the University of Utrecht, Utrecht, Holland.

William James, Professor of Psychology in Harvard University, Cambridge, Mass.

Felix Klein, Professor of Mathematics in the University of Göttingen, Göttingen, Germany.

Rev. George Trumbull Ladd, Clark Professor of Moral Philosophy and Metaphysics in Yale University, New Haven, Ct.

Samuel Pierpont Langley, Astronomer and Physicist, Secretary of the Smithsonian Institution, Washington, D. C.

Henry Charles Lea, Historian, Philadelphia, Pa.

Joseph LeConte, Professor of Geology and Natural History in the University of California, and President of the American Geological Society, Berkeley, California.

James Loudon, President of the University of Toronto, Canada.

Seth Low, President of Columbia University, New York City.

John William Mallet, Professor of Chemistry in the University of Virginia, Charlottesville, Virginia.

Silas Weir Mitchell, Neurologist, Philadelphia, Pa.

Henri Moissan, Professor of Chemistry in the University of Paris and Member of the French Academy of Sciences, Paris.

Simon Newcomb, Mathematical Astronomer, Director of the Nautical Almanac, Washington, D. C.

William Peterson, Principal of McGill University and Professor of Classics, Montreal, Canada.

Edward Bagnall Poulton, Hope Professor of Zoology in the University of Oxford, Oxford, England.

Ira Remsen, Professor of Chemistry and Director of the Chemical Laboratory in the Johns Hopkins University, Baltimore, Md.

Henry Augustus Rowland, Professor of Physics and Director of the Physical Laboratory in the Johns Hopkins University, Baltimore, Md.

Andrew Seth, Professor of Logic and Metaphysics in the University of Edinburgh, Scotland.

Goldwin Smith, Fellow of Oriel College, Oxford, and formerly Regius Professor of Modern History in the University of Oxford, Toronto, Canada.

Joseph John Thomson, Cavendish Professor of Physics in the University of Cambridge, Cambridge, England.

Benjamin Ide Wheeler, Professor of Greek in Cornell University, Ithaca, N. Y.

L.H.D.—Henry Martyn Baird, Professor of the Greek Language and Literature in New York University, New York City.

Richard Watson Gilder, Editor of The Century, New York City.

Thomas Raynesford Lounsbury, Professor of English in Yale University, New Haven, Conn.

Francis Andrew March, Professor of the English Language and Comparative Philology in Lafayette College, Easton, Pa.

Horace Elisha Scudder, Editor of The Atlantic Monthly, Boston, Mass.

Charles Dudley Warner, Author, New York City.

Mus.D.—Edward Alexander McDowell, Professor of Music in Columbia University, New York City.

In Absentia.

LL.D. —Otto von Struve, formerly Director of the Imperial Observatory, Pulkowa, Russia.

Lord Kelvin, Professor of Natural Philosophy in the University of Glasgow, Scotland.

HONORS—1895-1896.

COMMENCEMENT HONORS. FOR GENERAL EXCELLENCE.

SENIOR HONORMEN.—FIRST GROUP—*A.B., Magna cum laude.*

P. H. Churchman, C. B. McMullen,
F. L. Critchlow, W. A. Mather,

L. H. Gray,
E. B. Hodge, Jr.,
F. W. Loetscher, *Latin Salutatory*,
A. H. Lybyer, *English Salutatory*,
J. J. Moment,
R. B. Perry,
J. M. Trout,
E. S. Worcester, *Valedictory*

SECOND GROUP—*A.B.*, *Cum laude.*

F. O. Allen, Jr.,
H. B. Armes,
J. N. Beam,
E. H. Bishop,
C. B. Bostwick,
C. O. Bressler,
H. C. Briggs,
J. B. Cochran,
J. R. Delafield,
A. L. P. Dennis,
A. A. Doolittle,
W. F. Doty,
J. P. Erdman,
E. W. Hamilton.
A. T. Johnson,
L. Kirkman,
R. R. Knight,
W. E. Lampe,
R. L. Litch,
R. M. McElroy,
B. A. Mason,
G. F. Moll,
M. C. Morgan,
W. H. Musser,
J. L. Myers,
C. E. Patton,
H. G. Pierce,
J. A. Potter,
S. C. Reese,
S. G. Riley,
J. C. Sherriff,
S. R. Spriggs,
H. Ure,
F. H. Ward,
G. H. Waters,
L. J. Wayave, Jr.,
T. Y. Wickham,
C. A. Wilson,
J. R. Zeigler.

THIRD GROUP—*A.B.*

L. F. Bower,
C. M. Bowman,
E. S. Brearley,
H. M. Bruen,
T. C. Coe,
J. H. Crawford,
A. N. Easton,
C. M. Evans,
J. C. French, Jr.,
T. L. Gaskill,
W. J. Haines,
B. S. Halsey,
S. W. Miller, Jr.,
E. K. Mills,
F. P. Mudge,
F. C. Okey,
F. T. Saussy,
J. H. Scheide,
F. S. Smithers, Jr.,
W. F. M. Sowers,
J. H. Stopp,
C. W. Wisner, Jr.,
C. L. Woodburn,
W. J. Wright.

SENIOR SPECIAL HONORS.

PHILOSOPHY. *High Honors* — William Edmund Lampe, Albert Howe Lybyer, John James Moment, John Moore Trout, Robert McNutt McElroy. *Honors*—William Furman Doty, Alexander Nelson Easton.

HISTORY, JURISPRUDENCE AND POLITICS. *High Honors*—Frederick William Loetscher, Albert Howe Lybyer, Robert McNutt McElroy. *Honors*—Henry Beard Armes.

CLASSICS. *High Honors*—Louis Herbert Gray.

MODERN LANGUAGES. *High Honors*—Edward Hodge Bishop, Philip Hudson Churchman, Theodore Clifford Coe. *Honors*—Jacob Newton Beam, William Henry Musser.

ENGLISH. *High Honors*—Herbert Ure.

MATHEMATICS AND PHYSICS. *High Honors*—Robert Lincoln Litch, Stanley Chester Reese.

FELLOWS.

(For names of Fellows see p. 23.)

SENIOR PRIZEMEN.

ALEXANDER GUTHRIE MC COSH PRIZE.

W. A. Mather.

LYNDE PRIZE DEBATE.

First, R. M. McElroy.
Second, F. W Loetscher.
Third, E. W. Hamilton.

Lynde Debaters.

From the American Whig Society.	*From the Cliosophic Society.*
E. W. Hamilton,	W. F. Doty,
F. W. Loetscher,	A. N. Easton,
R. M. McElroy,	A. H. Lybyer.

BAIRD PRIZEMEN.

The Baird Prize,	J. M. Trout.
In Oratory,	J. J. Moment.

In Delivery,	R. B. Perry.
In Poetry,	F. C. Macdonald.
In Disputation,	*First*, R. M. McElroy.
	Second, A. N. Easton.

Competitors appointed for Excellence in English Composition: For Baird Prize and Prize for Oratory—J. N. Beam, W. A. Mather, J. J. Moment, M. C. Morgan, R. B. Perry, J. M. Trout, E. S. Worcester. *For Prize for Oratory*—H. B. Armes, J. B. Cochran, W. F. Doty, J. P. Erdman, E. W. Hamilton, A. H. Lybyer, H. Ure, G. H. Waters.

CLASS OF 1859 PRIZE IN ENGLISH LITERATURE.

S. R. Spriggs.

GEORGE POTTS BIBLE PRIZES.

S. R. Spriggs.
L. Kirkman.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.

E. W. Hamilton.

THEODORE CUYLER PRIZE IN ECONOMICS.

A. H. Lybyer.

CLASS OF 1869 PRIZE IN ETHICS.

J. M. Trout.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.

A. L. P. Dennis.

THE NEW YORK HERALD PRIZE.

H. B. Armes.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.

W. W. Potter.

JUNIOR PRIZEMEN.

JUNIOR FIRST HONOR SCHOLAR.

H. N. Russell.

MACLEAN PRIZE.

A. W. Leonard.

JUNIOR ORATOR MEDALS.

First, W. M. Post.
Second, C. G. Richards.
Third, J. H. Keener.
Fourth, F. B. Cowan.

Competing Junior Orators.

From the American Whig Society.	*From the Cliosophic Society.*
J. H. Keener,	F. B. Cowan,
A. W. Leonard,	W. M. Post,
F. M. Wood,	H. F. Stockwell,
C. G. Richards,	E. C. Thompson.

DICKINSON PRIZE.

Robert Comin, with honorable mention of J. H. Keener.

THOMAS B. WANAMAKER ENGLISH PRIZE.

J. H. Keener.

CLASS OF 1870 JUNIOR ENGLISH PRIZES.

Anglo-Saxon, A. W. Leonard.
English Literature, J. H. Keener.

JUNIOR HONORMEN.

First Group.

E. W. Axson,	H. G. Padget,
Robert Comin,	A. M. Patterson,
J. H. Keener,	H. N. Russell,
W. A. McLaughlin,	Nicholas Stahl.
J. H. Nichols,	

Second Group.

H. M. Beam,
F. W. Brown,
P. R. Colwell,
L. C. Cooley, Jr.,
C. J. Dunlap,
E. G. Elliott,
Seward Erdman,
W. F. Evans,
J. M. Frame,
J. P. Hall,
D. E. Hollister,
George Howe,
F. N. Jessup,
W. P. Jessup,
A. M. Kennedy,
A. W. Leonard,
David Magie, Jr.,
B. R. Miller,
L. H. Miller,
D. E. Nevin,
F. J. Newton,
S. M. Palmer,
F. B. Pierson,
W. M. Post,
W. B. Ramsey,
E. H. Scott,
L. H. Shearer,
James Smitham,
W. A. W. Stewart,
H. F. Stockwell,
Hervey Studdiford,
E. C. Thompson,
A. C. Tyler,
Harry Van Cleaf.

JUNIOR HONORMEN, SCHOOL OF SCIENCE.

B.S. Course. *C.E. Course.*

First Group.

S. W. Taylor, Jr.

Second Group.

H. V. Babcock,
F. R. Hausaling,
J. W. Ryle,
Edwin Shortz, Jr.,
J. M. Townley.
John De Gray,
R. T. Leipold,
H. A. Harris.

SOPHOMORE PRIZEMEN.

CLASS OF 1861 PRIZE.

H. H. Yocum.

FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE.

M. T. Williams.

CLASS OF 1870 SOPHOMORE ENGLISH PRIZE.

H. H. Yocum.

STINNECKE SCHOLAR.

Richard Webster.

CLASS OF 1876 MEMORIAL PRIZE IN DEBATE.

M. F. Loofbourrow.

SOPHOMORE SPECIAL HONORS.

GREEK. *High Honors*—J. W. Churchman. *Honors*—H. E. Belcher, R. S. Birch, J. I. Blair, Jr.

LATIN. *High Honors*—H. E. Belcher, C. H. Hale, F. L. Johnson, H. H. Yocum. *Honors*—G. A. Armstrong, E. P. Prentice, F. K. Watson.

MATHEMATICS. *High Honors*—C. L. McCoy, R. F. L. Ridgway, P. E. Robinson, H. H. Yocum. *Honors*—L. P. Bryant, F. N. Emerson.

SOPHOMORE HONORMEN.

First Group.

J. W. Churchman,	Van Rensselaer Seminary, Burlington, N. J.
F. L. Johnson,	Newark High School, Newark, N. J.
P. C. Martin,	Wittenberg Academy, Springfield, O.
R. F. L. Ridgway,	Peddie Institute, Hightstown, N. J.
H. H. Yocum,	Mercersburg College, Mercersburg, Pa.

Second Group.

G. A. Armstrong,	Newburg Free Academy, Newburg, N. Y.
H. E. Belcher,	Union Free Academy, Newark Valley, N. Y.
R. S. Birch,	Reading High School, Reading, Pa.
J. I. Blair, Jr.,	Mr. Browning's School, 29 W. 55th St., N. Y.
H. A. Brown,	Long Branch High School.
F. W. D'Olier,	Van Rensselaer Seminary, Burlington, N. J.
C. H. Hale,	The Webb School, Bell Buckle, Tenn.
W. A. Harbison,	Western University of Pennsylvania.
W. F. McCombs,	The Webb School, Bell Buckle, Tenn.

M. B. Morehouse,	East Orange High School.
C. A. Morton,	Peddie Institute, Hightstown, N. J.
E. P. Prentice,	Halsey's Collegiate School, 34 W. 40th St., N. Y.
P. E. Robinson,	Lawrenceville.
Leon Stein,	Newark High School, Newark, N. J.
J. S. Thomas,	Mr. Leal's School, Plainfield, N. J.

SOPHOMORE HONORMEN, SCHOOL OF SCIENCE.

B. S. Course.

Harrison Hall,	Mr. G. C. Deaver, Collegiate Inst., Dayton, O.
C. P. Beistle,	Friends' School, Germantown, Pa.
F. C. Groos,	San Antonio Academy, San Antonio, Texas.
H. W. Garner,	High School, Ottumwa, Iowa.

C. E. Course.

E. C. Heald,	Friends' Select School, Wilmington, Del.
H. H. Kennedy,	De Lancey School, Philadelphia.
T. J. Skillman,	State Model School, Trenton, N. J.

FRESHMAN FIRST HONOR PRIZE.

W. M. Schultz.

FRESHMAN HONORMEN.

First Group.

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N. M. Carter,	High School, Huntington, N. Y.
M. H. Kratz,	Perkiomen Seminary, Pennsburg, Pa.
W. M. Schultz,	The Hill School, Pottstown, Pa.
A. S. Weston,	St. Johnsbury Academy, St. Johnsbury, Vt.

Second Group.

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C. H. Breed,	Shadyside Academy, Pittsburgh, Pa.
W. J. Campbell,	Mr. Newton F. Vail, 606 Lexington Ave., N. Y.
W. C. Erdman,	Germantown Academy, Germantown, Pa.
C. Y. Freeman,	East Denver High School, Denver, Col.
S. C. Huey,	The Hamilton School, Philadelphia, Pa.

O. D. Kellogg,	Lawrenceville,
H. F. Mitchell,	High School, Yonkers, N. Y.
E. P. Newton,	Blair Hall, Blairstown, N. J.
G. K. Reed,	Lawrenceville.
N. S. Reeves,	Boys' High School, Brooklyn, N. Y.
J. M. Vincent,	Collegiate Institute, Hamilton, Canada.
G. S. Voorhees,	Princeton Preparatory School.
Richard Webster,	Polytechnic Institute, Brooklyn, N. Y.
J. R. Woodcock,	Bellefonte Academy, Bellefonte, Pa.

FRESHMAN HONORMEN—SCHOOL OF SCIENCE.

E. C. McWilliams,	Harry Hillman Academy, Wilkes Barre, Pa.
H. N. Twells,	William Penn Charter School, Philadelphia.
E. T. Clark,	High School, Dayton, O.
H. G. Euwer,	Kiskiminetas Springs School, Saltsburg, Pa.
F. P. Ekings,	Classical and Scientific School, Paterson, N. J.
R. H. A. Carter,	High School, Montclair, N. J.
Ralph Root,	Dearborn-Morgan School, Orange, N. J.
L. A. Robb,	Newark Academy, Newark, N. J.
R. P. Elmer,	West Jersey Academy, Bridgeton, N. J.
J. A. Ely, Jr.,	University Grammar School, N. Y. City.

PRIZES FOR FRESHMAN ENTRANCE EXAMINATIONS.

Alumni Prize in New York City—William Van Buskirk.

Harrisburg	—H. S. Zimmerman.
Pittsburgh	—S. B. Scott.
Missouri	—H. J. Brandt.

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The annual meeting and the Alumni Dinner are held in University Hall on Tuesday of Commencement week, at 1:30 P. M. The membership includes all graduates and officers of the University.

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Secretary, GEORGE W. BURLEIGH, Esq., '92, 11 William St.

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Secretary, HENRY C. STEWART, Jr., Esq., '84,
620 14th St., N. W., Washington.

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Secretary, JOSEPH F. GUFFEY, '94.
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Founded 1875.

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Secretary, EDWARD H. ERNST, Esq., '82.
419 Madison St., Covington, Ky.

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Secretary, ALVIN C. MCCORD, Esq., '89, "The Rookery."
Assistant Secretary and Treasurer, PAUL V. CARY.

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Secretary, ——— ———

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12 St. Paul St., Baltimore.

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Founded 1889.

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Secretary, A. D. BALL, Esq., '92, 98 Hillside Ave.

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676 East Genesee St., Syracuse, N. Y.

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Secretary, HENRY W. FOX, Esq.,
24 West Seneca St., Buffalo, N. Y.
Secretary, GERARD B. F. HALLOCK, '82,
10 Livingston Park, Rochester, N. Y.

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Secretary, JOHN H. THACHER, Esq., '95,
Kansas City, Mo.